A Prognostication

euerlasting of ryght good effecte, frutefully augmented by thauthor, cõteyning playne, brief, pleasant, chose rules to iudge the weather, by the *Sunne, Moone, Sterres, Cometes, Raynbowe, Thunder, Clowdes*, with other extraordinarie tokens, not omitting the *Aspectes* of *Planetes*, with a briefe iudgement for euer of *Plentie, Lacke, Sickenes, Death, warres, &c.* opening also many *naturall causes* woorthy to be knowen. To these and other nowe at the last are adioyned diuers general pleasãt *Tables*, with many cõpendious rules, easy to be had in memorie, manifolde wayes profitable to al maner men of vnderstãding: once againe published by *Leonard Digges Gentleman*, in the yeare of our Lorde.

1556.

The seconde Impression augmented by the author in the

yeare 1556. Anno Imprinted [illegible]

BRITISH MUSEUM

To the ryght honorable Sir Edward Fines, of the noble order of the Garter Knight, Lorde Clinton and Saye, &c. Leonard Digges wysseth continuance of health, and dayly encreace of honour.

After my troubles (ryght honorable and my singular good lord) my dutie made me careful to procure, that some frute of my studies might declare me thankfully minded toward your Lordshyp among other honorable, to whome I owe my selfe with al my endeuour and frutes of study. For the performance whereof, not only your Lordshyppes talke moued of a *Prognostication* semed then to make that argumēt fittest, but also the manifest imperfections, & manyfolde errors yearely cōmitted did craue the ayde of some that were both willing and able to perfourme the truthe in like matters. As I thought it then for these causes worthy the labour, truely and briefly to collect many thynges both necessary and pleasant, as wel for Nobilite as other, and to adioyne them to my generall *Prognostication* imprinted in the yeare 1553, augmenting diuerse wayes thesame, and more orderly placing suche as were before set furth: so sythens calling to minde other right pleasant rules and conclusions, lykewyse perteynyng to the purpose aforesayd, & bearyng still in mynde a lyke thankefull remembrance of your goodnesse, I thought it mete at this editiō to encrease it ones agayne, and by presenting it vnto your honour, declare the continuance of my ryght hearty zeale to acknowledge your goodnesse. As therfore in the other your Lordshyp receiued in one lytle boke by infallible rules taught for euer a truthe of such thynges as before were put forth in many volumes by other, eche for one yeares profit only, whereby the authors were of necessitie compelled to make a yearely renewyng of them with yearely encreace of errours: and further you had in it diuerse other conclusions generall of none before attempted: so in this your Lordshyp shall yet receyue the same in sundry places more playnly and fully set fourth, and other not vnprofitably adioyned, as in perusing shall euidently appeare. These with my moste humble thākes for your great goodnes all maner wayes declared towarde me, accordyng to my dutie I do present vnto your honour, and beseche you in good worth to receaue: and haue willed them to passe vnder protection of your lordshippes name, that if to any man any commoditie shall ensue thereby, suche as receiue it may haue cause to further me in yeldyng thankes to your honour.

To the Reader.

TO auoyde (gentle Reader) the yearely care, trauailes, and paynes of other, with the confusiõs, repugnances, and manifolde errors, partly by negligence, and oft through ignorance committed: I haue agayn briefly set forth a *Prognosticatiõ generall*, for euer to take effect: adioinyng therto diuers profitable collectiõs, and many pleasant conclusions, ralye of all willing ingenious to be perceyued. Here note (Reader) where as the *eleuate Pole*, & *Meridian* should be cõsidered, in this worke it is persourmed for London, by cause I wyll the this *Meridian*, *Situation*, or *Clime* the exacte truthe of thinges. If any yeately practises in like maters agree not with my calculations, be assured they are false, or at the least for other *Eleuations*, or *Meridians* supputated, and therfore litle serning thy purpose. And that thy late rude inuentions, and grosse deuises of some this yeare, and two yeares past, published might be of them perceyued, then filed, and so serue to some profit. I haue purposed euen now to put forth a boke named *Panauges*, wel serning their turne, and so generally and moste exactly al Europe, pleasant, profitable to the learned, and no small delight to all maner men. An other booke is also al ready come to thy handes, titled *Tectonicon*, a treasure vnto the Masons, Carpenters, and Landmeaters, correcting their olde errors wrongfully rekened of them as infallible grounde, teaching faithfully, sufficiently, and very briefly, the true mensuration of all maner lande, tymbre, stone, bourde, glasse, &c: and at the ende conteining an *Instrument Geometrical* appointed to their vse. Take in good worth these labors (louing Reader) & loke shortly for the pleasant frutes *Mathematical*, euen suche as haue bene promysed by my frendes, and partly by me. Neyther shall my desire to profit here staye: but entendeth farther to procede, if these seme accepted. As the good wil of Printers not had hath kept the foresaid from you: so I truste the wylling mynde and excellencie of Thomas Gemini shal bryng thẽ shortly vnto you. Certes my hope is, whyle life remaineth, not to be vnfruitfull to this cõmune wealth, with study, and practyse.

(.*.)

BRITISH MUSEUM

Agaynſt the reprouers of Aſtronomie, and ſciences Mathematical.

IAm diuerſly occaſioned (louing Reader) ſomewhat to wryte in the commendation of the *Mathematicals*: whiche neded not, but only to open the foliſh raſſhenes, and raſſhe foliſhenes of ſuch, which of late haue in wryting diſprayſed theſe goodly artes. It is an olde ſayd ſawe, and trewe: *Scientia non habet inimicum niſi ignorantem.* But to auoide tedioufnes, and chiefly for the more ſatiſfayng, I refer all of that ſorte, whiche haue taſted any learnyng (the reſt not regarded) to the firſt part of famous *Guido Bonatus de utilitate Aſtrononmie in communi*: where he wryteth *contra illos, qui dicunt quod Scientia ſtellarum non poteſt ſciri ab aliquo: contra illos, qui dixerunt quod ſcientia ſtellarum non eſt utilis, ſed potius damnoſa &c. contra illos, qui contradicunt iudicijs Aſtronomie, & qui reprehendũt eam, neſcientes dignitatem eius, eo quod non eſt lucratiua.* Alſo for breuitie, I appointe all nyce diuines, or (as *Melancthon* termeth them) *Epicurei Theologi*, to his hie commendations touching *Aſtronomie*, vttered in his epiſtles to *Simon Grineus*, to *Honerus*, and to the peroration of *Cardanus* fyue bokes, where he ſheweth how far wyde thei alledge the ſcriptures againſt the *Aſtronomer*, whiche make wholy with the *Aſtronomer*. *Melancthon* wryteth and affirmeth, *Arrogantiam eſſe cum ſumma ſtultitia coniunctam, uenari choragium aliquod glorie ex inſectatione artium, que ſunt graui autoritate doctorum &c. prudentium recepte.* He called it *manifeſtum inſanie genus*, declaring *quod magis opus habent Medicis, quam Geometris*, aduiſing the lerned not to geue eare vnto their folye. *Sinamus (ait) una cum Epicuro ineptire.* Whiche counſel lo, I folowe. Now therfore, ye enemies of al good doctrine, either geue an ouerthrowe, and that with your penne, or let famous *Guido*, or learned *Melancthon* ſatiſfie. If neither: certes I will ſhortly (God ſparyng lyfe) take ſome payne in publiſhyng the wonderfull vnknowen pleaſant profites of theſe diſprayſed hyghe knowleges, and by that meanes to enforce ſilence. Now in fewe, for thy encouragement in theſe, thus I ſaye and trewly, the ingenious learned, and well experienced circumſpect ſtudent *Mathematical* receiueth dayly in his witty practiſes more pleaſant ioye of mynde, then all thy goodes (how ryche ſo euer thou be) can at any tyme purchaſe. *Id tantum quod pulchrum eſt, quod purum eſt, quod diuinum eſt, nihil mortale ſapiens dulci ardore amplectitur. Vt multa paucis, crede mihi, extingui dulce erit Mathematicarum artium labore.* Nowe to ende, that learned *Guido*, that excellent *Guido Bonatus*, ſheweth what *Aſtrologi* or *Aſtronomie* is, and ought not ſayeth he, by any meane to be repre-

Vituperant, qui ſimpliciter eas ignorant.

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not desired, yea vtterly despised and of some busy byghting bodies
reiected as very lies? Let no man doubt ignorauncie, the great ene-
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hanc artem uulgus, propter errores non arti, sed hominum indo-
ctissimorum inscitie, & temeritati imputandos, qui
citra delectum omnia effutiunt. Thus I
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Stulti negligũt & contemnũt: qui contradicit ambitiosus est. qui maledicit, fatuus.

BRITISH MUSEUM

FRom the nert side to the fifth leafe are conteined the formes of a *Quadrant*, *Square*, *Circle*, *Quantities*, with a figure truly placing the sayd *Quantities* in the *heauen*.

From the 5 to the 13 ye haue the iudgement of weathers by the *Sunne*, *Mone*, *Sterres*, *Cometes*, *Raynbow*, *Thunder*, *Cloudes*, with extraordinarie tokēs & aspectes of *Planetes* &c.

The 13, 14, 15 and 16 leaf shewe the causes of suche alteration according to *Aristotel*, first of the *Raynbow*, then *Rayne*, *Frost*, *Dew*, *Snowe*, *Haile*, *VVyndes*, *Earthquakes*, *Thundres*, *Lyghtninges*, *Cometes*, *Sunne* and *Moone eclipsed*, *Quantities* of the *Planetes*, and their *placing* ocularly demonstrated.

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The 20 & 21 haue *Tables* for the *Sonday letter*, for the *Golden numbre* or *Prime*, for the *Epact* and *Mouable feastes*, many wayes conducing.

The 22, 23 and 24, the age of the *Moone*, the chaūge and quarters for euer ar declared, the *Ebbing* and *Flowynges*, the breake of the *Daie*, the *Sunne ryssyng*, the length of the *Day* and *Nyght*, the *Twylight* for all the yeare.

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From the 29 to the 34 leafe, ye haue the *Peculiar Kalendar*, very cōmodious for the day and nyght houre.

The 35, 36, and 37, declare the infortunate dayes of the whole yeare with a *Kalendar General*, and *Tables* as generall for the chiefe *Fayres* of *England*.

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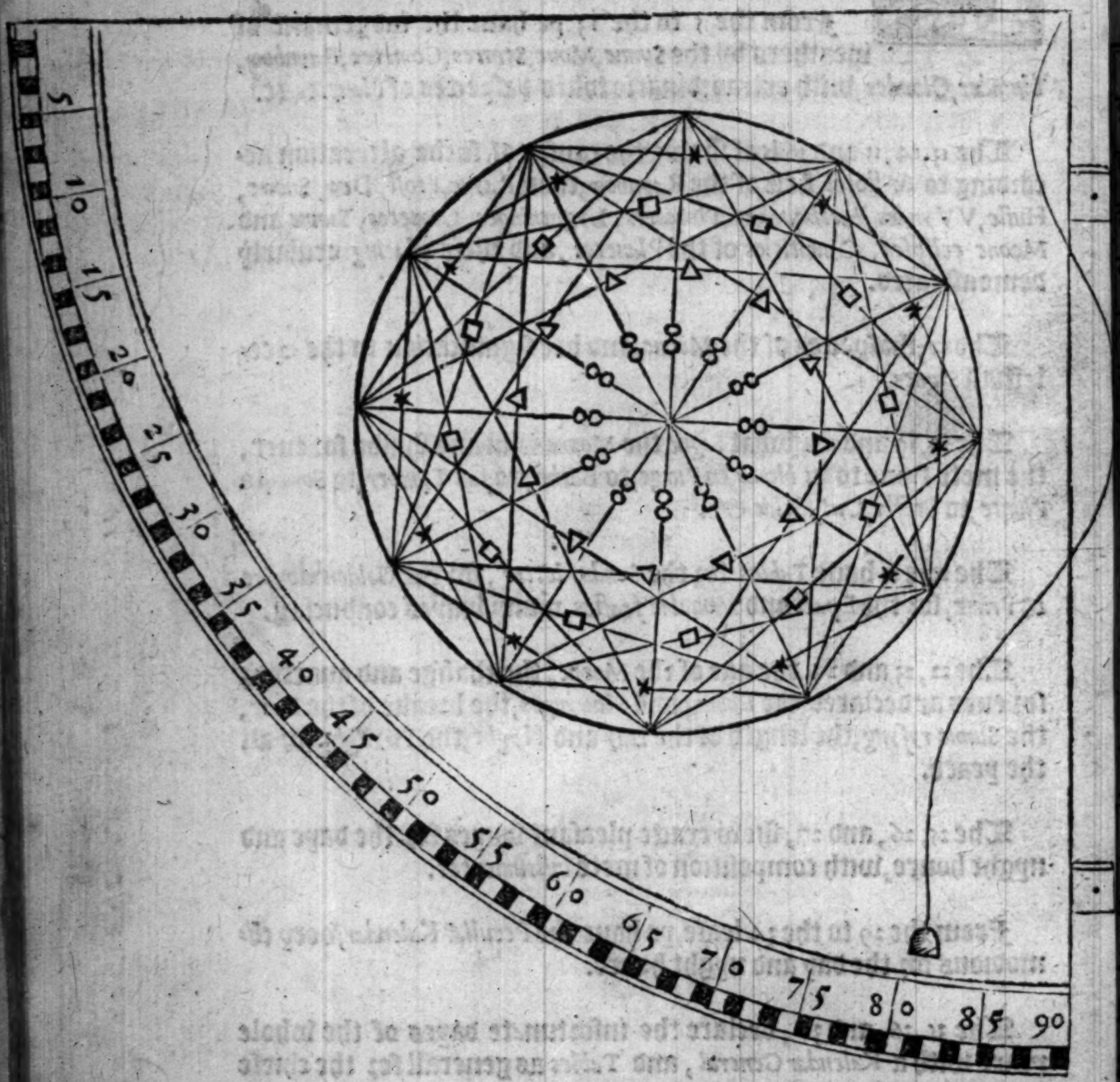
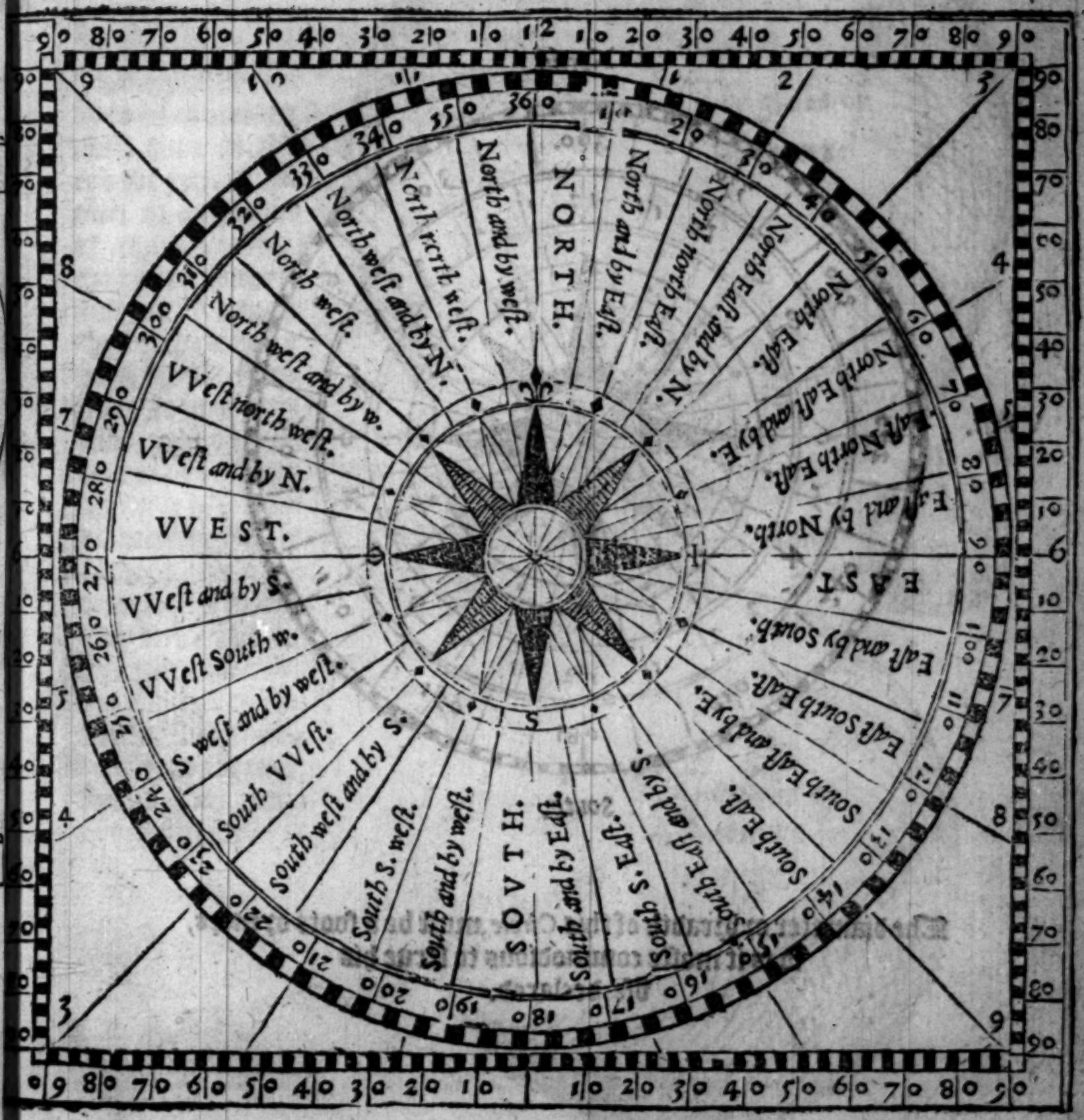
This *Quadrant* is apoynted here to get exactly the lẽgth of *Staffe* and *Squire* shadowe, howe vnleuell soeuer the grounde be, as I haue sufficiently instructed in the 38. leafe.



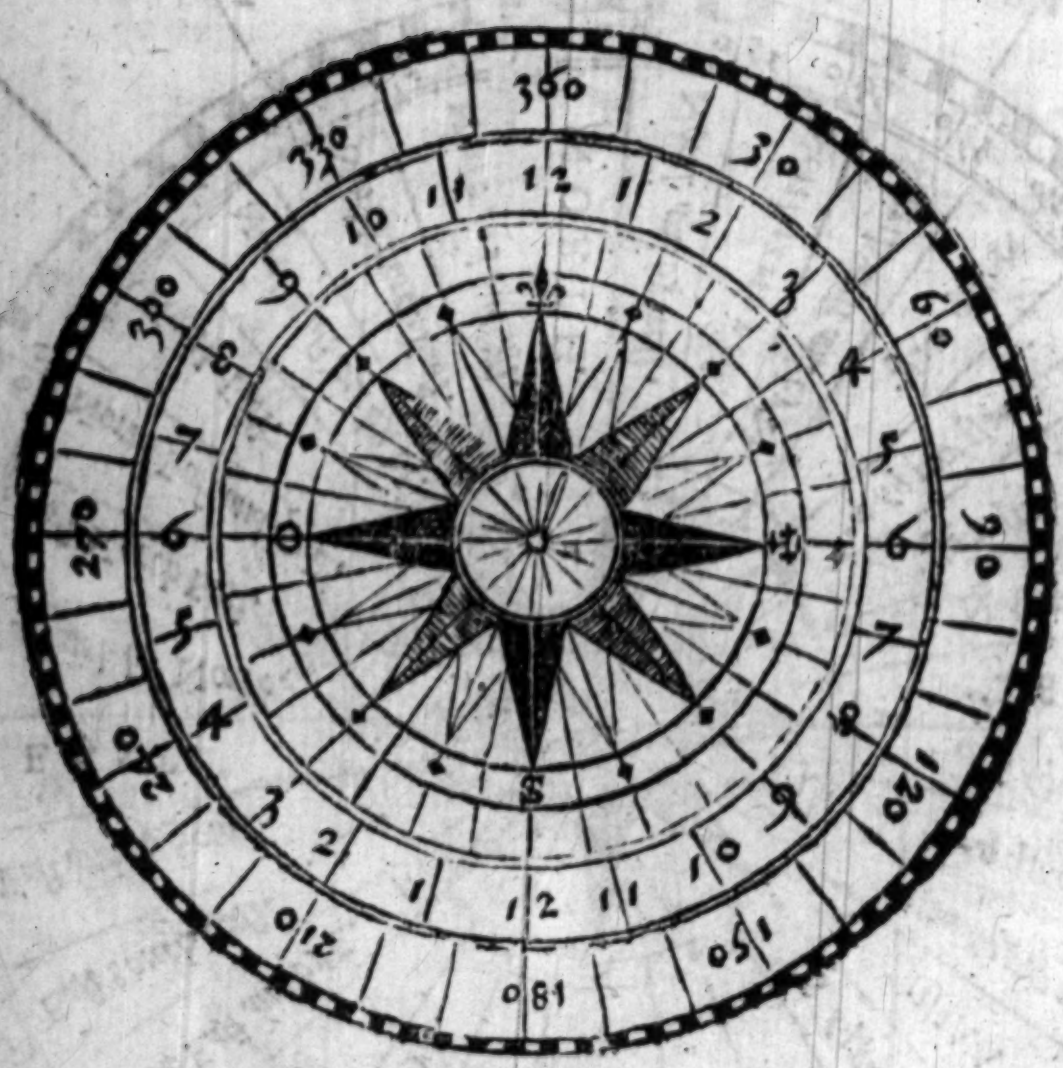
If ye lyst not to make a *Quadrante*, ye may vse this very wel: adding a plumbmet and lyne, with sightes or otherwyse.

This Instrument must be made in a playne fine metall plate, a foote or more square. Then it is pleasant for the houre of the daye and nyght, either to be fixed about your house, or moueable if ye lyst, by a Nedle to be placed where and when ye wyl.
The 26 leafe sheweth the making.



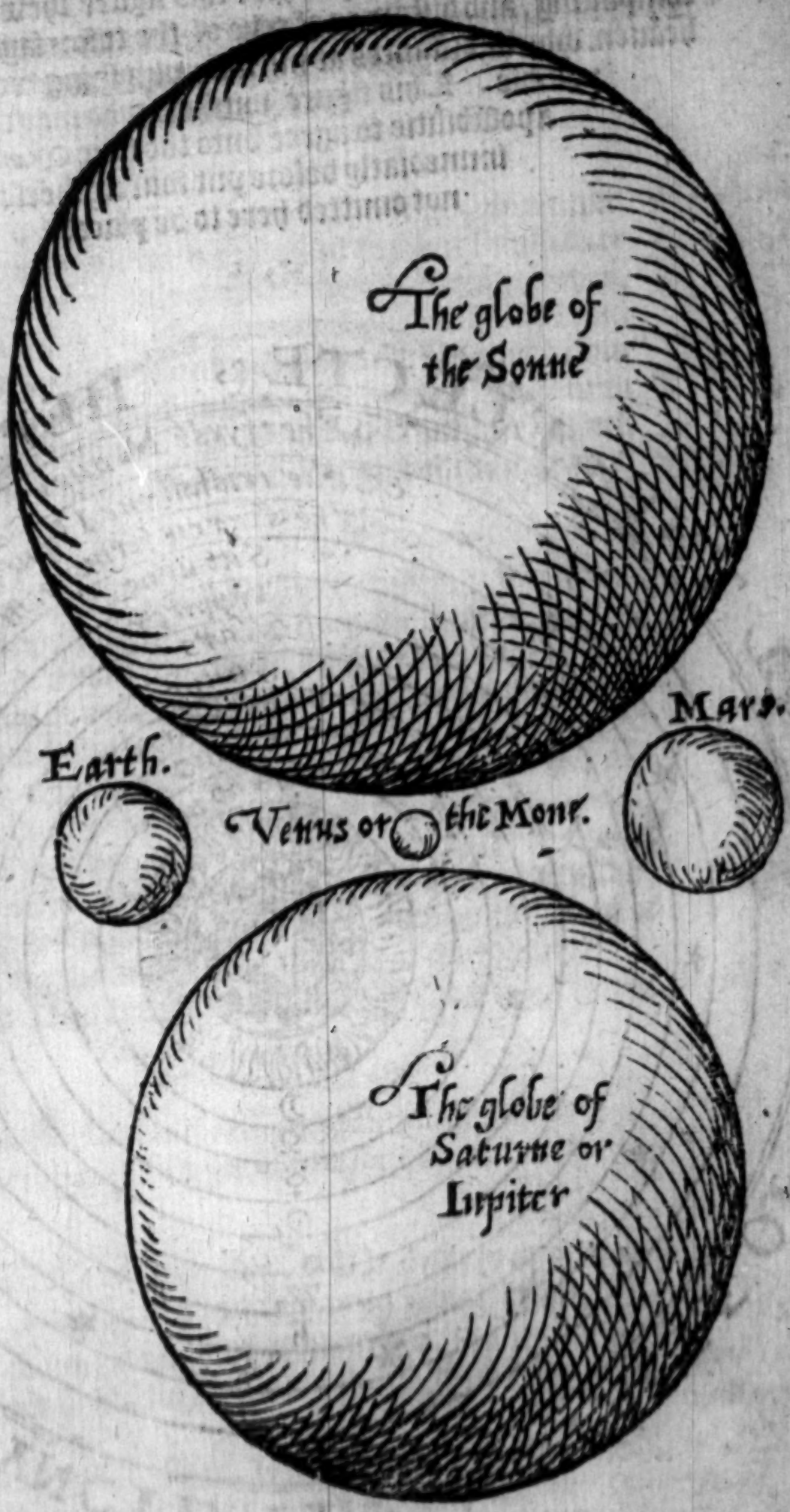
The good Maryner may long for the vse of this Instrument:
it serueth marueloussly his tourne. A. iij.

Or thus, without the Square this Circle will ſerue well your purpoſe, beyng exactly made, and truely placed.

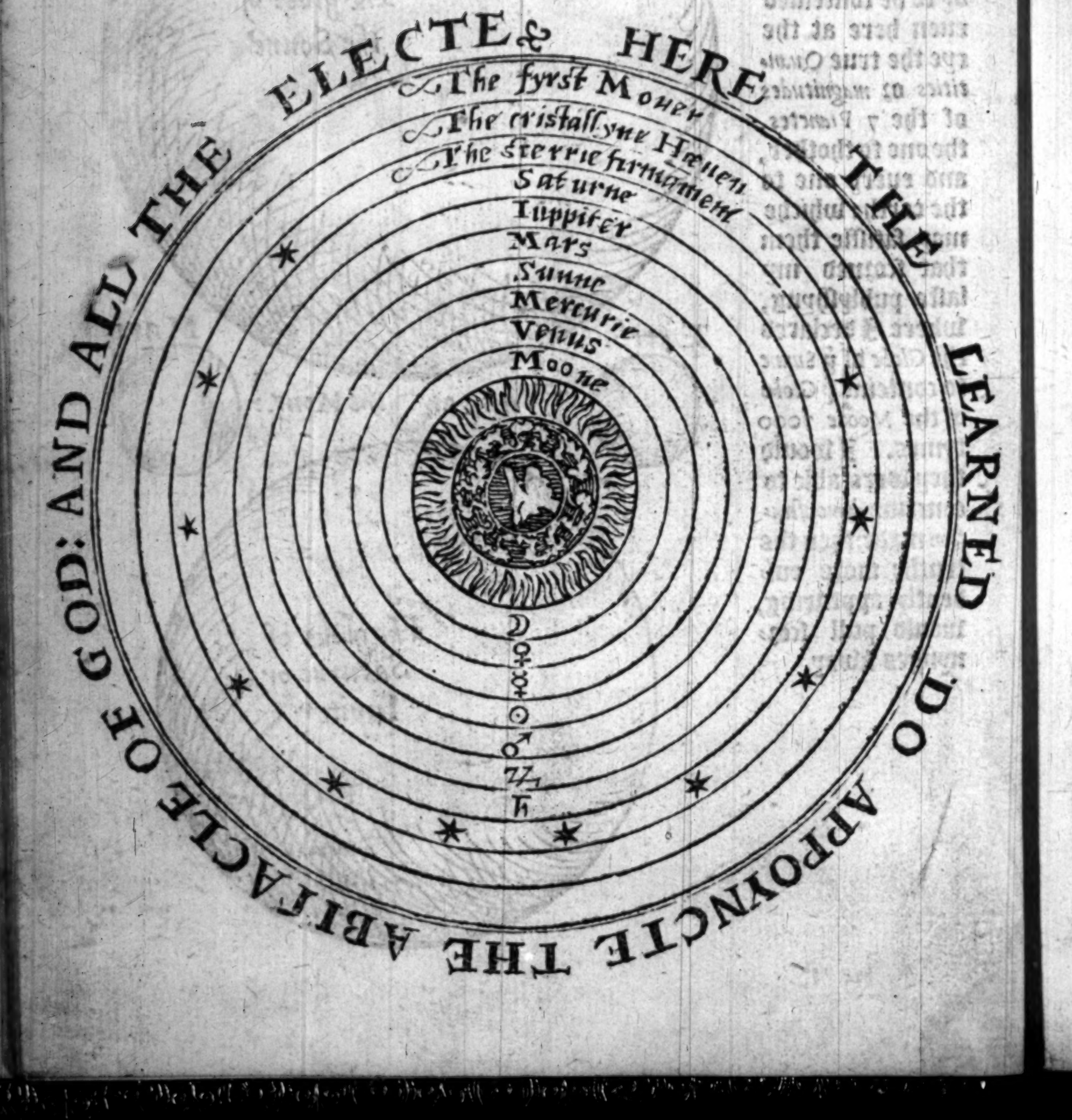


The diameter or breadth of this Circle, muſt be a footé or more, ſo is it moſte commodious to ſerue his vſe declared.

I haue placed ready to be conceiued euen here at the eye the true Quantities or magnitudes of the 7 Planetes, the one to thother, and euery one to the earth: whiche may satisfie them that scorned my laste publyshyng, where I declared the Globe of ꝑ Sunne to conteine ꝑ Globe of the Moone 7000 tymes. I would they were able to conceiue demonstration made: then the truthe more euidently appearing, would pull scornynges away.



I thought it mete also to put here this figure, shewing the placing, compalling, and distances of eche of the tofozesayd *Planetes* in the heauen: whiche distances at my last publyshing were thought impossible. This figure witily wayed may confirme a possibilitie to agree vnto the true *Quantities* immediatly before put fourth, therfore not omitted here to be placed.



HOVVE TO IVDGE VVEATHER by the Sunne ryſing or goyng downe.

De obſeruandis meteoris.

THe Sunne in the Horizon, or ryſynge, cleare and bright, sheweth a pleasant day: but thinly ouercast with a cloude, betokeneth fowle weather. Also at the going doune the body diuerse coloured or redde, & aboute diſperſed with lyke cloudes, the beames redde, & of lengthe, pronounce gret windes, the next day frō that part. Blacknes in the Sunne or Moone, betookeneth water, Read, signifieth winde.

The elemēt redde in the euening, the nert day fayre, but in the morning rēdde, wynde and rayne. Also the Sunne beames spottid, grene, pale, or black, gathered to a cloude, signifieth raine. Further the Sunne at the setting playnly seene without any cloude, declareth a fayre nyght to ensue. Here note, Ptolome willeth vs diligentlye to obserue the circle, or circles about the Sunne. If it be cleare, and the circle of no continuaunce, beholde fayre weather: If many of thē, wynde. Wyndes more vehemente are signified, if that the circles be somewhat redde, here & there broken: but these obscured, thicke, and blacke, looke for colde, wynde, and snowe. What is spoken of the Sunne, touching the circles, thesame is ment of the Moone.

Note here that greater wyndes chaunce in the daye, then in the nyght. *Note.*

Howe weather is declared by the coloure of the Moone, and by the nature of the Signe wherein she is.

IF the Moone in the thirde of her chaunge, yea thre daies before the ful, or in the middes of the quarter, be founde of pure light, nothyng compassing her, the ende direct vp, she promiſith fayre weather, but bent to red colour, prouoketh winde. The Moone pale or somewhat inclined to blacke, obscure or thicke, threatnith raine. *Luna rubens ventat, pallor pluit, Albaſcit serenat.*

Also by the nature of the signe, weather may be iudged, thus, according to Steſlerinus, Monte regius, Leupoldus, and famous Guido Bonatus, with others well trauayled in the mutacions of ayer.

♈ ♌ ♐ hote.

♉ ♍ ♑ eauthy.

♊ ♎ ♒ wyndy.

♋ ♏ ♓ watry.

COnsider the nature of the Signe where the Moone is, at the chaũge, quarter, & ful. If she be in hote & drie Signes, as Aries, Leo, Sagittarius, in Wynter a good token of faire weather: In Sommer, a great signification of immoderate Heate: If in earthy, colde and drie Signes, as Taurus, Virgo, and Capricornus, in Wynter iudge Colde, Frost, and Snowe to ensue: But in Sommer temperate Weather. In aery and wyndy Signes, as Gemini, Libra, and Aquarius, muche wynde. If in Watry Colde and Moyste Signes, as Cancer, Scorpius, and Pisces, in Winter wet Weather: In Sommer a pleasant temperature.

ALso, the Sunne in Aquarie: the Moone at the chaũge there, or in Sagittarie, or at ỹ ful in Leone: betokeneth raine. The Sunne in Pis. or in Aries: the Mone, in Virgo, Libra, or Sagittarie: signifieth rayne, especially in watry dwellynges. The Moone in Aqua. or Pis. looke for chaunge of weather: then chiefly she troubleth the ayre. The Moone also at the chaunge, or rather at the full, in Aries, Libra, Scorpius, or Pisces, tempestuous weather foloweth. The Sunne in Aquari, in Aries, Libra or Scorpio, but chiefly in Leone: the Moone then at the full, and that after rayne or mistinges, loke for lyghtening, thundryng. &c. Also the Sunne or Moone, founde in Pisces, without all helpe of Mars, it betokeneth aboundaunce of rayne, lyghtning, thunder. &c. To conclude the Moone, in Cancer, Leo, Capricornus, or Aquarius, ayded with anye aspecte, but chiefly with the opposition or quadrate of Venus, rayne foloweth.

The iudgement of weather by sterres.

Cum maiora apparent, tum enim Humore medius crassescit aer.

BEholde the Sterres whose magnitude you knowe best. If they appeare of much light, in bignes great, more blasing then thei are commonly, it betokeneth great wynde or moysture in that parte where they shew: in winter, colde & frost. When sterres seme to runne in the Element, it sheweth wynde. Affirme also alteratiõ of weather if they be fewe in nũbre, cloudie, & of litle light. Further when dimme sterres appeare with long firie tailes iudge wyndes, and great droughte: the more in numbre, the greater effect. When sterres in the night (as it is sayde) shote, or seme to fall, it argueth wynde in that part. If in diuers places, inordinate wyndes: if in all places, then pronounce wyndes, thunder, lyghtenynges, yea weather moste tempestuous.

The

The signification of Cometes.

COmetes signifie corruption of the ayre. They are Signes of Earthquakes, of Warres, chaungyng of Kyngdomes, great dearthe of Corne, yea a common death of Man, and Beast.

Pontanus sic scribens: Ventorum quoque certa dabunt tibi signa Cometae: Illi etiam belli motus, feraque arma minantur, Magnorum & clades populorum, & funera regum aquarum significat penuriam.

De cometarum prodigiis, lege Cardani lib. 4. Fol. 83. et Antonii Mizaldum de Cometographia.

Howe by the cloudes chaunge of weather is perceiued.

IF thycke cloudes resemblyng flockes, or rather great heapes of wol, be gathered in many places, they shewe rayne. Also when grosse, thicke, darke clowdes, ryght ouer the North parte, or somewhat declynyng to the West, are close with the earth, immediatly followeth rayne. If they appeare lyke Hylles, somedeale from the earth, a good token of weather ouerpassed. Blacke clowdes, signifie rayne: Whyte clowdes appearyng in Wynter, at the *Horizon*, two or thre dayes together, prognosticate colde, and snowe.

Of the rayne bowe and his effecte, touching alteration of ayre.

IF in the morning the *Raynebowe* appeare, it signifieth moysture, onles great droughthe of ayre worke the contrarie. If in the euenyng it shewe it selfe, fayre weather ensueth: so that aboundaunt moyste ayre take not away the effect.

Arcus nisi sole aduerso non fiunt.

Or thus.

THE Raynebowe appearing, if it bee fayre, it betokeneth foule Weather: if foule, loke for fayre weather. The Greener, the more rayne: Redder, wynde.

Non apparet nisi cum Vapores rarisicantur, uel inspissantur,

Of Thunders: what they Signifie.

Signum futurorum bellorū.

THunders in the morning, signifie Wynde: About Noone, rayne: In the euening, great tempest.

Somme wryte (their ground I see not) that Sondayes Thundre, shoulde bryng the death of learned men, Iudges & others: Mondayes Thondre, the death of women: Tuesdayes Thundre, plentie of grayne: VVednesdayes Thundre, the deathe of Harlottes, & other blodshede: Thursdayes Thundre, plentie of Shepe, and Corne: Frydaies Thundre, the slaughter of a great Man, and other horrible murders: Saturdayes Thundre, a generall pestilent plage and great deathe.

Howe weather is knowen after the chaunge of euery Moone by the prime daye.

SUndaye prime, drie weather. Mondaye prime, moist weather. Tuesday prime, colde and wyndy. Wednesdaie prime, wonderfull. Thursdaies prime, fayer & cleare. Frydaies prime, myrte weather. Saterday prime, moyst weather.

Nowe ensueth extraordinarie tokens for the knowledge of weather.

Commune tokens of weather, mete for all maner wittes.

SOme haue obserued euil Weather to folow, whan watry Fowles leaue the Sea, desiring lande: the Foules of the lande flying hyghe: the Crying of fowles about Waters making a great noyse with their wynges: Also the Sees swellyng with vncustomed waues: If beastes eate gredely: If they lycke their hooues: If they sodaynlye moue here and there making a noyse, brethyng vp to the ayre with open nostrels: rayne foloweth. Also the busy heuing of Moules, the appering or cōming out of Wormes: Hennes resorting to the perche or reste couered with dust, declare rayne. The Ample worcking of the Spinnar in the ayre: the Ant busied with her egges: the Bees in fayre weather not farre wandryng: the continuall pratyng of the Crowe, chiefly twyse

twyse or thryse quycke calling, shew tempest. When the Crowe or rauen gapeth against the Sunne, in Sommer heate foloweth. If they busy thẽselues in proyning or wasshyng, and that in Wynter, loke for raine. The vncustomed noise of pultry, the noise of Swine of Pecokes declare thesame. The Swalowe flying and beating the water, the chirping of the Sparow in the morning, signifie rayne. Raine sodainly dried vp, Woody couerinnges strayter then of custome: Welles harde further then commonly, the wallowyng of Dogges, the alteratiõ of the Cocke crowyng, al declare rainy weather. I leaue these, wanting the good grounde of the rest. If the learned be desyrefull of the to forsayd, let them reade graue Virgil *primo Georgicorum* At Bor, &c.

There be a multitude of other not extraordinarie, but of the best knowẽ causes: many for breuitie here omitted, the moare part not mencioned, because they passe the capacitie of the common sorte, vpon all the whiche the *Astronomer* doth well & learnedly conclude. I doubte not, there be also sometyme vnknowen maters, mittigating the aforesayde, or prouoking tempest vnloked for, whiche neyther experience, ne learning, hath stablyshed. Howe vnkynde (these considered) yea howe farre from worthy thankesgeuing are they, whiche in generall heddely do blame checkyng bitterly the *Astrologer*, with these Iudiciarie matters, (the least part among a numbre of his moste certayne doynges) whan thynges fortune contrary to expectation? Understande gentle reader: the consent of a multitude famously learned is their Buckelar, euen in these matters indiciari: Who haue wayed a longe tyme prudently, the greate strength, the vehement force, and marueylous natures, of all erraticall and celestiall constellacions, with their *Angles Radiations, Aspectes, affections, Stationes, Progressions, Defections, Dispositions, Applications, Preuentions, Refrenations, Contrarieties, Abscisions, Coniunctiõs Quadratures*, and *Oppositions*. &c. Therfore extreme foly, yea more then madnes doth he vtter, which imbraideth or backbiteth these knowledges, not remembring the great, and manifolde benefites had through them, & that with moste certaintie in all other doynges.

What *Meteoroscoper*, yea who learned in matters *Astronomical*. noteth not the great effectes at the rising of the starre called the *Litle dogge*? Treuly the consent of the best learned doo agree of his force: yea *Plinie*, in his History of nature affirmeth the seas thẽ moste fiers, Wines to flow in cellars, Standig waters to moue, Dogges inclined to madnes, then moste wood. Farther these constellaciõs, *Canis minoris efficatia.*

Orionis, Arcturi, Coronae, Capre, Succula rum effectus.

Orion, Arcturus, Corona, rising prouoke tempestuous weather. The Kyd & Goate, wyndes. Hyades or Succule rayne. What Meteorologer cõsenteth not to the great alteration and mutation of ayre at the cõiunction oppositiõ, or quadrate aspect of Saturne, with eyther twoo lyghtes? Who is ignorant, yea menely trauayled in Astronomie that Iupiter with Mercurie, or with the Sunne, inforceth rage of wyndes? What is he that perceiueth not the fearefull thũders, lyghtninges and raynes, at the meting of Mars & Venus, or Iuppiter and Mars. &c. Leaue for shame to impugne these iudicialles strongly authorised.

♂ □, & ☍, ♄ cum ☉ aut ☽.

He that any other part carpith may seme more then madde. All truthe, all experience, a multitude of infallible grounded rules are against hym. *Certum est omnibus que notum, quod coeli motus, signorum ortus, & occasus, planetarum aspectus, & cõiunctiones, luminariũ eclipses, &c. Certissimam, determinatam, ac infallibilem habent causam. Quis iam sane mentis negabit eorum effectus sepe immotescere, ut pote bella, fames, grandines, aeris perturbationes, elementorũ commotiones, terre motus, & similia?*

Positis causis naturalibus, & non impeditis, sequitur effectus.

♂ ☄ □ & ☍. cum ☿ aut cũ ☉ &c.

The learned that listeth ingeniously to prognosticate of weather will not only discretely waye all before wrytten, but consyder also with them the *Aspectes of the Planetes* folowyng and their *Combustion in the. 12. Signes, with the Coniunctions* of fired ✡terres *Mansions*, of the Moone, *Ascendent, Climes, &c.* Also the *tymes or quarters of the yeare* must be noted diligently, (as insueth) and iudgement accordingly pronounced.

Of the yeare deuided in foure quarters.

♈ ♉ ♊ Power of the brest.

♎ ♏ ♐ ♑ ♒ ♓ Power ouer all Flumes.

THE *Springtyme* is hote and moyste: and continueth so long as the Sunne is in *Aries, Taurus* and *Gemini*: which is from the tenth of *Marche* vnto the twelfthe of *Iune*. The Somer is Hoote and Drye, coumpted from the beginning of *Cancer*, to the ende of *Virgo*, that is from the twelthe of *Iune*, to the fourtenth of *September*. Harueſt is coolde and drie: that is from the beginning of *Libra*, vntd the ende of *Sagittarie*: coumpted from the fortene of *September* to the thirtene of *Nouembre*. Wynter is colde and moyste: continued from the beginning of *Capricornus*, to the ende of *Pisces*: that is frõ the twelth of *December*, to the tenth of *Marche*.

Nowe

Nowe folowe the aſpectes of the Planetes for the better iudgement of VVeather

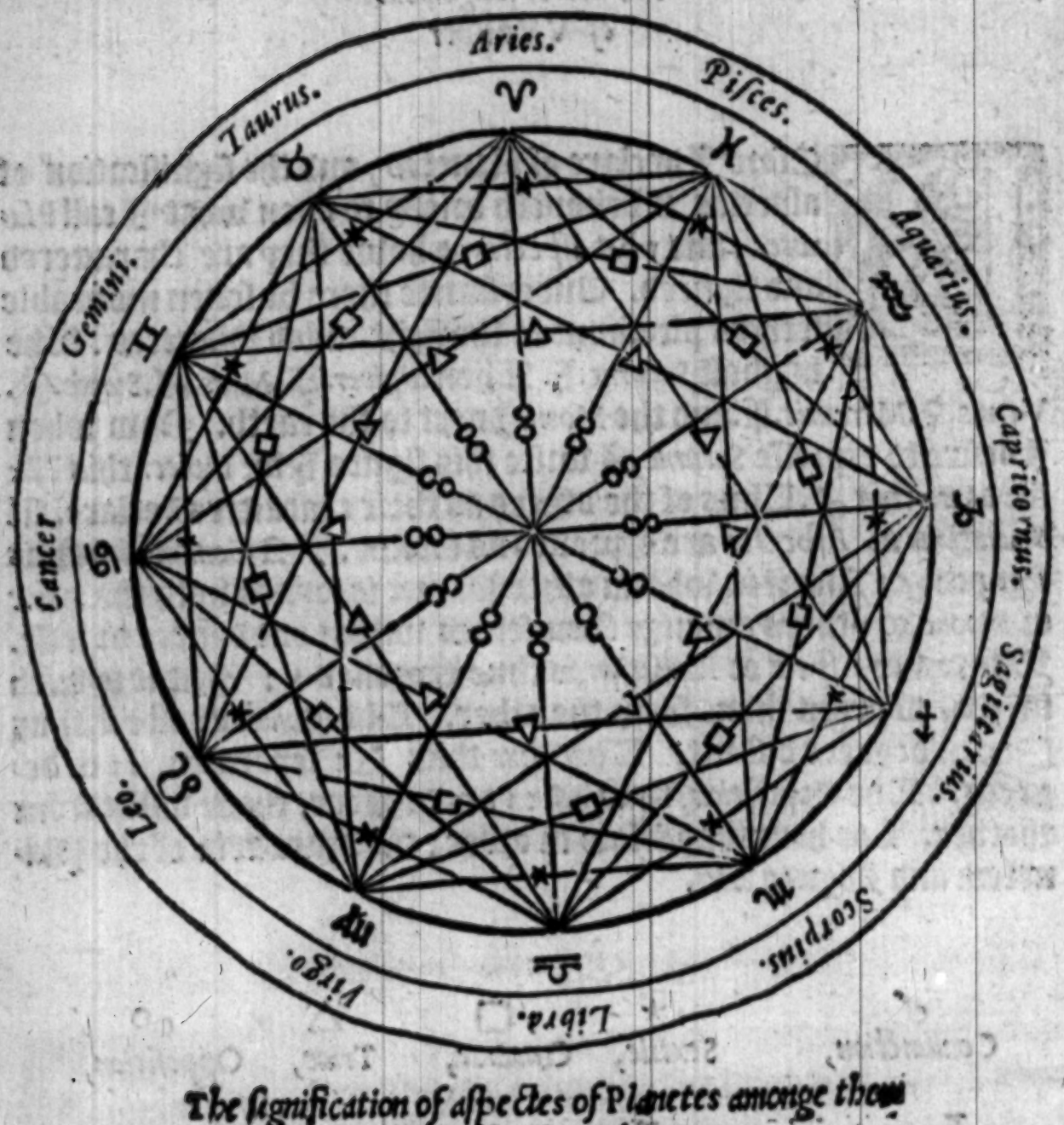
BEfore I declare of planetes, and the ſignification of aſpectes, it behoueth briefly to open what I call *Planetes*, and *what aſpectes*, & howe they are charactered and figured. Underſtande there be ſeuen moueable ſterres pleaſaunt to the ſight, called Planetes. The hyghest *Saturne*. ♄. Then *Iupiter*. ♃. *Mars*. ♂. *Sunne*. ☉. *Venus*. ♀. *Mercurie*. ☿. and the *Moone* ☽ nert to the earth. Now when I deſire to expreſſe *Saturne*, I write this figure ♄: for *Iupiter* this ♃: for *Mars* this ♂. Thus of the others as their characters declare. Al *Radiations* or *Aſpectes* are expreſſed as folowe. A *Coniunction* thus figured ☌: And it is, whē an other Planet is ioyned with the *Sunne* or *Moone*, or others amonge themſelues, within one degree or leſſe. The *Sextile Aſpect* or *Radiation*, is thus expreſſed ✶: And it is with in. 60. degrees thone from the other. The *Quadrate aſpect*, thus □: 90. degrees diſtant. The *Trine* thus △: ſeperated. 120. degrees. The *Oppoſition*, thus ☍: 180. degrees, thone diſtāt from thother. Loe here they folow in order: the characters of the Planetes: and Signes alſo.

☌	✶	□	△	☍
Coniunction,	Sextile,	Quadrat,	Trine,	Oppoſition,

♄	♃	♂	☉	♀	☿	☽
Saturne,	Iupiter,	Mars	Sunne,	Venus,	Mercurie	Moone,

♈	♉	♊	♋	♌	♍
Aries	Taurus	Gemini	Cancer	Leo	Virgo
♎	♏	♐	♑	♒	♓
Libra	Scorpius	Sagittarius	Capricornus	Aquarius	Piſces

Yet for more playnesse beholde this figure.



The signification of aspectes of Planetes amonge themselues: for the iudgement of weather.

♄ ☌ ♃, cum ♐

THe coniunction or meting of Saturne with Iupiter, in fierie Signes, inforceth great drought: In Watry Signes, Fludds, continuall Rayne, generall ouerflowynges. &c. In Aery Signes, plenty of Wyndes.

♄ □ ☍, & ☍, cum ♐

The Quadrature, Sextile, or Oppolition of Saturne, with Iupiter, in moyst Signes causeth troubled Ayre, by Payle, Wynde, Rayne, Thunder. &c. before and after.

The con-

The coniunction, Quadrature, or oppositiõ of *Saturne* with *Mars*, in watry Signes, declare in Sommer rayne, often shoures, with hayle, thunder and lyghtening. ♄ ☌ □, ☍ ♌ *cum* ♂

The coniunction, quadrature or oppositiõ of *Saturne* with the *Sunne*, chiefly in colde Signes, shew darke weather, haile, rayne, thunder, and colde dayes. ♄ ☌ ♌, ☍ ♌, *cum* ☉

The coniunctiõ, quadrature, or oppositiõ of *Saturne* with *Venus*, in wynter, engẽdre colde and rayne, principally in moyst Signes: in Summer, mitigation of heate. ♄, ☌ □, ☍ ♌ *cum*, ♀

The coniunction, quadrature, or oppositiõ of *Saturne* with *Mercuri*, in watry Signes, bring raine: in hote or drie Signes, drought: in Summer, thunder, lyghtnynges, and tempest. ♄ ☌ , □ ☍ ♌ *cum* ☿

The coniunction, quadrature, or oppositiõ of *Iuppiter* with *Mars*, in moyst Signes, declare thunders, lyghtninges, & rayne: in wynter, snowe, or cloudie thycke weather. ♃ ☌ □, ☍ ♌, *cum* ♂

The coniunction, quadrature, or oppositiõ of *Iuppiter* with the *Sunne*, great and moste vehement wyndes. ♃ ☌ , □ ☍ ♌, *cum* ☉

The coniunction, quadrature or oppositiõ of *Iuppiter* with *Venus*, in moyste Signes, colde and mistynges: in the rest signes, fayre weather. ♃ ☌ □, ☍ ♌, *cum* ♀

The coniunction, quadrature or oppositiõ of *Iuppiter* with *Mercurie*, great wyndes. ♃ ☌ □ ☍ ♌, *cum* ☿

The coniunction, quadrature, or oppositiõ of *Mars* with the *Sunne* in firie Signes, drought: in watry, thunder, and rayne. ♂ ☌ , □ ☍ ♌, *cum* ☉

The coniunction, quadrature, or oppositiõ of *Mars*, with *Venus*, in moyste Signes, rayne and tempest. ♂ ☌ , □ ☍ ♌, *cum* ♀

The coniunction, quadrature or oppositiõ of *Mars* with *Mercurie* in hote Signes, great heate: in drie Signes, drought: in watry, raine: sometimes thũders, lightninges, with sodain fierce wyndes. ♂ ☌ □ ☍ ♌, *cum* ☿

The coniunction, quadrature or oppositiõ of *Venus* with *Mercurie*, causeth rayne: in Somer they prouoke tẽpest, the more if they agre in watry Signes. Note what is sayd of the coniunction, qua-

drature or opposition, the same is also ment of the Sextile & Trine: but they are of lesse signification: so the lerned noteth.

A declaration of weather by aspectes of the Moone with Planetes.

☽ ☌ □ ☉ ☍, cum ♄ THe Coniunction, Quadrature or Opposition of the *Moone* with *Saturne*, in moyste Signes, bryngeth a cloudy daye, colde ayre, according to the nature of the Signe: If she goo from *Saturne*, to the *Sunne*, by coniunction or otherwyse, harder weather ensueth.

☽ ☌ □ ☉ ☍, cum ♃ The Coniunction, Quadrature or Opposition of the *Moone* with *Iupiter* in *Aries* or *Scorpio*, sheweth fayre weather, White dispersed cloudes.

☽ ☌ □ ☉ ☍ cum ♂ The Coniunction, Quadrature or Opposition of the *Moone* with *Mars* in watry Signes, rayne: In hoote Signes, diuers coloured cloudes are made, all the element ouer: In Sommer, often thunder.

☽ ☌ □ ☉ ☍ cum ☉ The Coniunction, Quadrature or Opposition of the *Moone* with the *Sunne* in moyst Signes, rayny weather: The more if the *Moone* go from the *Sunne* to *Saturne*.

☽ ☌ □ ☉ ☍ cum ♀ The Coniunction, Quadrature or Opposition of the *Moone* with *Venus*, chiefly in moyste Signes, rayne foloweth: The *Moone* goyng from *Venus* to *Mars*, more varietie of weather.

☽ ☌ □ ☉ ☍ cum ☿ The Coniunction, Quadrature, or Opposition of the *Mone* with *Mercurie*, in moyst Signes, sheweth rayne & wynde, the more when the *Moone* palleth from *Mercurie* to *Iupiter*: then great wyndes folowe.

Howe

How VVeather is iudged by the Oriental and Occidental station of Planetes, with their combustion in the. 12. Signes celestiall. First of the Planetes in Aries.

SATVRNE in *Aries* combust, that is to saye vnder the beames of the Sunne, maketh a cloudy darke troubled aire: *Orientall*, I meane in the morning appearyng before the Sunne, fayre VVeather: *Occidentall*, that is to saye shewyng himselfe after the Sunne goyng downe, betokeneth great wyndes. ♄ in ♈

VVhat these termes Cõbust *Orientall*, and *Occidentall*, meane.

Iupiter in *Aries* cõbust, a token of rayne: beyng *Occidental*, it bringeth cloudes, and dewes: *Oriental*, fayre pleasant wether. ♃ in ♈

Mars in *Aries* combust and *Occidental*, good weather: contrary *Oriental*. ♂ in ♈

Venus in *Aries* combust *Occidental*, moystnes, great wyndes: *Oriental*, thunders and raynes. ♀ in ♈

Mercurie in *Aries* combust, tempest: *Occidental* and *Oriental*, fayre wyndy weather. ☿ in ♈

Of the Planetes in Taurus.

SATVRNE in *Taurus* combust, and stationarie, bringeth thicke cloudes, thunders and troublesome weather. ♄ in ♉

Iupiter in *Taurus* combust, indifferẽt weather: *Occidental*, pleasant shoures. ♃ in ♉

Mars in *Taurus* combust, a quiet ayre: but *Oriental*, wyndy. ♂ in ♉

Venus in *Taurus* combust, thunders. &c. *Occidental*, fayre. ♀ in ♉

Of the Planetes in Gemini.

♄ in ♊ SATVRNE in Gemini combuſt & Occidental, drought.

♃ in ♊ Iuppiter in Gemini combuſt, a good ſignification.

♂ in ♊ Mars in Gemini combuſt and Occidental, heat.

♀ in ♊ Venus in Gemini combuſt Occidental, wynde.

☿ in ♊ Mercurie in Gemini combuſt, wynde.

Of the Planetes in Cancer.

♄ in ♋ SATVRNE in Cancer cõbuſt, darke weather, great wyndes & troubleſome weathers: Occidental, calmer.

♃ in ♋ Iuppiter in Cancer combuſt, bryngeth calme pleaſaunt weather.

♂ in ♋ Mars in Cancer combuſt, great heat.

♀ in ♋ Venus in Cancer combuſt, a quiet calme tyme.

☿ in ♋ Mercurie in Cancer combuſt, tempeſtuous weather, chiefly on the Sea: Occidental, calmer.

Of the Planetes in Leone.

♄ in ♌ SATVRNE in Leone combuſt, maketh wyndes & myſtynges.

♃ in ♌ Iuppiter in Leone combuſt, pleaſaunt wyndes.

♂ in ♌ Mars in Leone combuſt, Occidental, drought.

♀ in ♌ Venus in Leone combuſt, drought.

☿ in ♌ Mercurie in Leone combuſt, wyndes.

Of the

Of the Planetes in Virgo.

SATVRNE in Virgine combuſt, is a Significator of infirmities. ♄ in ♍

Iupiter in Virgine combuſt, manifeſteth abondaunce of thinges. ♃ in ♍

Mars in Virgine combuſt, lyke vnto Saturne. ♂ in ♍

Venus in Virgine combuſt drought: Oriental, contrary. ♀ in ♍

Mercurie in Virgine cõbuſt, drought, raging Seas: Occidental, drought. ☿ in ♍

Of the Planetes in Libra.

SATVRNE in Libra combuſt, sheweth infirmitie of ſight: Oriental, colde wyndes. ♄ in ♎

Iupiter in Libra combuſt, indifferent weather ♃ in ♎

Mars in Libra combuſt, bryngeth moyſture. ♂ in ♎

Venus in Libra combuſt moyſt ayre. ♀ in ♎

Mercurie in Libra combuſt, wyndes. ☿ in ♎

Of the Planetes in Scorpione.

SATVRNE in Scorpio combuſt, colde ayre: Occidental, froſt: Oriental, colde, north wyndes. ♄ in ♏

Iupiter in Scorpio combuſt, rayne: Occidental, bitter weather. ♃ in ♏

Mars in Scorpio combuſt, declareth moyſture: Orientall, wyndes. ♂ in ♏

Venus in Scorpio combuſt, rayne, both Occidental and Oriental. ♀ in ♏

Mercurie in Scorpio combuſt, ragyng weather, chiefly Oriental. ☿ in ♏

Of the Planetes in Sagittarius.

♄ in ♐ SATVRNE in Sagittarius combust, colde rayny ayre: Oriental, colde and frost.

♃ in ♐ Iupiter in Sagittarius cõbust, much raine: Oriental, wors weather.

♂ in ♐ Mars in Sagittarius combust, drought.

♀ in ♐ Venus in Sagittarius combust, rayne: Occidental, wynde and colde.

☿ in ♐ Mercurie in Sagittarius combust, rayne: Occidental, clere ayre.

Of the Planetes in Capricornus.

♄ in ♑ SATVRNE in Capricornus combust, signifieth darke weather with South wyndes: Occidental, colde: Oriental, north wyndes.

♃ in ♑ Iupiter in Capricornus cõbust, moist ayre: Occidental, increasing thesame.

♂ in ♑ Mars in Capricornus combust, cloudy: Occidental, some heate.

♀ in ♑ Venus in Capricornus combust, colde ayre: Oriental, rayne.

☿ in ♑ Mercurie in Capricornus combust, rayne, both Oriental and Occidental.

Of the Planetes in Aquarius.

♄ in ♒ SATVRNE in Aquarius combust, colde ayre: Occidental, daungerous sees: Oriental, rayne.

♃ in ♒ Iupiter in Aquarius combust Occidental, rayne.

♂ in ♒ Mars in Aquario cõbust, drought: Occidental & Oriental plẽty of wyndes.

♀ in ♒ Venus in Aquarius combust, cloudy: Occidental, hote: Oriental, rayne.

☿ in ♒ Mercuri in Aquarius cõbust, slowly: Occidental, more colde: Oriental, raine.

Of the

Of the Planetes in Piſces.

SATVRNE in *Piſces* combuſt, bryngeth clowdes. *Occidental*, rayne. ♄ *in* ♓

Iupiter in *Piſces* combuſt *Oriental*, calme waters. ♃ *in* ♓

Mars in *Piſces* combuſt *Occidental*, drought: *Oriental*, lightninge and thunders. ♂ *in* ♓

Venus in *Piſces* combuſt, colde: *Occidental*, diſpoſed to ſnowe. ♀ *in* ♓

Mercurie in *Piſces* combuſt, moyſt ayre. ☿ *in* ♓

Thus muche of the iudgement of weather.

SEYNG that I haue nowe ſufficiently declared howe, by what rules and tokens, weather is iudged: I thinke it conuenient to adioyne here a breſe collection, howe *Plentie*, *Scarcitie*, *Sickenes*, *Death*, *Alterations*, *Troubles*, *warres*, &c. are for euer perceaued.

A rule to Prognoſticate the aforeſayde, by the fallyng of Neweyeares daye.

IT is affirmed of ſome, when *Neweyeares daye* falleth on the *Sundaye*, then a pleaſant wynter doth enſue: a natural Sommer: fruicte ſufficient: Herueſt indifferent, yet ſome wynde and rayne: many mariages: plenty of wyne and hony: death of yonge men, and cattell: robberies in moſt places: newes of prelates, of Kynges: and cruell warres in the ende. *Sundaye.*

ON *Mondaye*, a wynter ſomwhat vncomfortable: Sommer temperate: no plenty of fruicte: many fanſies and fables opened: agues ſhall reigne: Kynges and many others ſhall die: mariages ſhalbe in moſte places: & a cõmen fal of Gentlemen. *Mondaye.*

ON *Tueſdaye* a ſtormy wynter: a wet Sõmer: a diuers Harueſt: corne and frute indifferent yet herbes in gardens ſhal not flowryſhe: great ſyckenes of men, women and yonge *Tueſdaye.*

chyldren

chyldren: Beastes shall hunger sterue, and dye of the botche: many shyppes, galleis, and hulkes, shalbe losste: And the bloudy fyres shall kyll many men: All thynges dere, saue Corne.

VVednesday. ON VVednesday, Loe a warme wynter: In the ende, snow and frost, a cloudy Sommer, plenty of fruicte, of corne, haye, wyne, and honye, great payne to women with childe, and death to infantes, good for shepe, newes of Kinges, great warres battell and slaughter towarde the myddes.

Thursday. ON Thursday, Wynter and Sommer wyndy: A rayny Herueste: Therfore we shal haue ouerflowynges: Much fruicte: plenty of hony: Yet flesshe shalbe dere: cattell in general shall dye, great trouble, warres. &c. With a licentious lyfe of the feminine sexe.

Fryday. ON Fryday, Winter stormy: Sommer scante pleasant: Herueste indifferent: litle store of fruicte, of wyne, and hony: corne dere: Many bleare eyes: Youth shall dye: Earthquakes are perceaued in many places: plenty of thunders, lightnynges, and tempestes: with a sodeu death of cattell.

Saturday. ON Saturday, a meane wynter: Sommer very hote: A late Herueste, good cheape garden herbes, muche burnynge: plenty of Hempe, Flare, and Hony. Olde folke shall dye in moste places: Feuers and Tercians, shall greeue many people: great mutteryng of warres: murders shalbe sodenly committed in many places, for lyght matters.

NOwe that I haue opened dyuers wayes, both for the learned and vnlearned, how weather to come at al tymes may be well iudged and knowen. &c. I thought it mete, for farther knowledge therein, not to omitte here the naturall causes of suche and so many alterations of ayre. Loe, therefore orderlye they folowe.

Naturall

Naturall causes, conducyng to all the aforesayde and first of the Raynbowe.

THe *Raynbowe* is the thryuyng and reboundyng of beamis of light, that tourne to the contrary vapour agayne in the cloude. It declareth sometyme rayne, and many tymes fayre weather: when the one, and howe the other, is before opened.

Of *Rayne.*

RAyne is a colde vapour, an earthy humour, or fumositics, out of waters or earth drawen vp by the vertue of the *Sunne*, to the nether parte of the midle space of the ayre there through colde thycked, then dissolued, thus engendred falleth on the earth.

Here I leaue to speake of miraculous raynes, as *Mylke*, *Bloude*, *Fleshe*, *yron*, *wol.* &c. For more satisfieng in these, reade *Plinius* in the second booke. 58. Chapter. *Quare lapides pluant, lege Pli. Lib. 2. Capit. 44.*

Of Frost and Dewe.

A Colde moyst vapour, a litle waye drawen vp in the daye thorowe faynt heate of the *Sunne*, descendeth in the nyght, dissolued on the earth, there cõgelated, or resolued into water, the one called Frost, the other Dew. The last is a sygne of fayre weather in the Spryng or Haruest. *Ros estate, pruina hieme fit.*

Of *Snowe.*

IT is a moyste vapour, drawen vp to the mydle region of the ayre, then thycked, and frosen into the body of a cloude: So congelated descendeth. *Nix humor modice concretus.*

Of *Hayle.*

A Cloude resolued into water, in the fall congelated maketh Hayle. The hyer it commeth from aboue, and the longer it tarrieth in the ayre, the rounder hayle. *Grando, pluuia in discensu congelata.*

Of wyndes.

Ventorū ergo materia, calida & sicca exhalatio.

VVynde is a multitude of *drye exhalations*, drawen vp from the earth: and aboue the earth enforced here and there.

Of earthquakes, in the moste quiet tyme.

Quemadmodū in nube tonitruum, sic in terra tremor.

PLenty of wyndes, entred into holes, cones, or caues of the earth, whiche absent from aboue the earth, causeth quietnes: the violent brustyng out of them (the earth closed againe) is the earthquake: *Signum est futurorum bellorum.*

Tokens of earthquakes to come.

A Fyry cloude, appering in the element lyke a lytle *Pyllar*, is a token of earthquakes to come. The obscuritie or darkenes of the *Sunne*, without cloudes, and straungely coloured, bloudy or otherwyse, is a token of earthquakes.

Signa terre motus.

Also when well water and others are troubled or salt, or infected by sauour &c.

A great quietnes of ayre, by lande and sea, and chiefly the longe absence of wyndes.

Also straunge noyses harde, as clamours of men, russhyng of harnes, mourninges lamentacions, &c. All these haue bene obserued, to signifie earthquakes at hande.

Of *Thunders and Lightninges.*

THunder is the quenching of fyre, in a cloude. Or thunder is an exhalation hote and drie myxte with moisture, carried vp to the *myddle region*, there thycked and wrapped into a cloude: of this hote matter coupled with moystnes, closed in the cloude groweth a stryfe, the heate beating, and breaking out the sydes of the cloude with a thundring noyse: the fyre then dispersed, is the lyghtninge. Thus for the learned: *Tonitruum sonitus est, qui editur quādo nubem rumpit halitus. Fulmen flamma uel repentinus est ignis, qui ex collisione nubium, aut ruptura nascitur.* Aristotel affirmeth the lightnyng after the thunder, but the fyre doth fyrst appere, in that the sight is before the hearyng. If this satisfie not, reade the seconde of his *Meteoron.* Here foloweth a note of lightninges.

Fulgetrū prius cerni, quam tonitrum audiri, cum simul fiant certum est, Pli. lib. 2. Cap. 56. contra Aristo.

There

There be thre kyndes of Lightninges, drye, moyst, and clere.

DRye do not burne but cleue, departe or diuide. Moyste burne not but alter colour. The *Clere* are of marueilous natures. Full barels by it are emptied. It melteth mony in the purs, it breaketh the swerde, the purs and scaberd not perysshed, yea, wex in them vnmolten. Note.

Of the Cometes or flames in the nyght.

A Comete is a flame, worckyng in a drie, hote, slymie *exhalation*, drawen vp to the hyghest part of the ayre. His mater or substaunce after it is brent dispersed, prouoketh wyndes. Ventorū causa

The naturall cause of the Sunne Eclypsed.

NOthyng els is the *Eclips* of the *Sunne*, but the directe puttyng the body of the *Moone* betwene the *Sunne* and the earth, or betwene our syght and the *Sunne*: whiche chaunceth onely at the change.

A Corollarie.

BY this gather the darkenes at Christes death, not to stande by naturall eclipticall cause: but by supernaturall, or miracle. For it was at the full *Moone*, the *Scriptures* witnes: which enforced *Dionisius Areopagita*, at the time of his passiō, to speake thus *Aut deus nature patitur, aut mundi machina dissoluitur.* Miracle.

The cause of the Moone eclypsed.

THe *Sunne* beyng in the contrarie poynt to the ful *Moone*, enforceth the shadowe of the earth, then directly put betwene the *Sunne* and the *Moone*, towarde the *Moone*, hyding more or lesse of the *Moone*, as she differeth from the *Ecliptical*. Some obserue pestilent plagues, soden batail, great dearth, to ensue these *Eclypses*: whiche all I desire God to auerte from his chosen. Many other thinges by this *Eclyps* are gathered, as *Longitudes* of countreis: the *quātitie* of the *Sunne*, cōtaining the bignes of the earth 162 times: the Vniuersalis est Eclipsis Lunæ. Non semper in nouilunio, sed in ca, et cauda.

Compasse of the earth 21600. myles: whose thycknes, according to Archimedes rule is, 6872. myles and eyght eleuenthes of a myle. The quantite of the Moone is the 43 part of the earth.

Omnium planetarum ad terrã magnitudo.

The Sunne contayneth the globe of the Moone 7000 tymes. Saturnus comprehendeth the bygnes of the earth 91 tymes: Iupiter, 95 tymes: Mars, ones & ten sirtenthes: Venus, the 37 part: Mercurius, one 32000 part of the earth.

Note here, that Alfraganus affirmeth the least fired sterre perfectly seen as bygge as the whole earth.

HÆc non erunt admirationi, si globi capacitatem ex longitudine diametri quesieris. Cõtinet enim solis dimetiẽs terre dimetientẽ quinquies & semissem. Estque proportio diametri solis ad terre dimetientem, que est numeri undecim ad duo, quintupla sesquialtera. Cubus solis mille tercentum unam & triginta partes tales continet, cuiusmodi terre cubus octonas complectitur. Cubus enim numeri undecim, est mille tercentum unum & triginta. Cubus uero binarii, qui est terre, octo. Subducto quoties id fieri potest, minore cubo qui est terre, a maiore qui est solis, cognoscitur cubi ad cubum proportio, & quanto Sol maior, terra sit. Inuenimus ergo octo centies, sexagies sexies, in mille tercentum unio & triginta.

Dimetiens ☉ ad terre dimetientem 11 ad 2

Cubus ☉ 1331
Terre 8

¶ Terre Diametros Lunae dimetientem complectitur ter, & duas eius diametri portiones quintas: estque ea proportio, dimetientis terre ad Lunae diametrum, que est septendecim ad quinque tripla superbipartiens quintas. Cubus numeri septendecim est quater mille nongẽta tredecim. Cubus numeri quinque est centum uiginti quinque. Maiore cubo per minorem distributo, reperimus numerũ centum uigintiquinque, tricies nouies in quater mille nongentis tredecim: quod paululum a superioribus obseruationibus differt.

Dimetiẽs terre ad lunã.
☽ 17. ad 5.
Cubus terre 4913. Cubus ☽ 125.

The quantities, or rather true proportion of all the Planetes unto the earth, ocularlie demonstrated by fygure folowyng.

Mercurie is but a poynt in respect of these Quantities.

By these fyue *Globes* are represented the true magnitudes of the seuen *Planetes*. One globe or lyke magnitude appointed for *Saturne* and *Iupiter*: Euen so for the *Moone* and *Venus*: the rest haue seuerall globes, (as ye may see) according to their quantities.

The nature course colour and placing of these seuen Planetes.

♄ SATVRNE is the hyghest and slowest in proper motion: colde, drie and pale, lyke vnto lede colour requiring thyrty yeares to ende his course. *Di. 9 ad 2.*

♃ *Iupiter* is next vnder *Saturne* temperate, fayre and bryght: his course is perfourmed in 12 yeares. *Di 32 ad 7.*

♂ MArs is hote and drie of fierie colour: in two yeares endeth his course. *Di 7 ad 6.*

☉ THe *Sunne* is placed in the mydle of all the *Planetes*, moste cleare and bryght, the well of pure lyght: euery yeare fynishyng his course. *Di 11 ad 2.*

♀ *Venus* is next to the *Sunne*, colde moyste & cleare, ye more brighter thē *Iupiter*: her course is lyke vnto the *Sunnes*: neuer aboue eyght and fourty degrees from the *Sunne*: called the *Morning sterre* when she goeth before the *Sunne*: cumming after the *Sunne*, she is named the *Euen sterre*. *Di 3 ad 10.*

☿ MErcurie is next vnder *Venus*, sumwhat shynyng, but not very bryght: neuer aboue 29 degrees from the *Sunne*, his course is lyke to *Venus*, or the *Sunnes* motion.

☽ THe *Moone* is lowest of al the seuen, running ouer ỹ whole *zodiacke* and sumwhat more, in 27 dayes & 8 houres. *Di 5 ad 17*

For more playnes of that whiche is opened, nowe shall folowe a fygure by the whiche ye may perceaue howe the *Orbe* of the one *Planete* cōpasseth the other. Also how these *Planetes* are placed in the heauen, yea whiche *Planete* is hyghest from the earth, and whiche nerest vnto vs. Consider well this figure, so neadeth no farther declaracion.

Ye may

GOD: AND ALL THE ELECTE & HERE
The fyrst Mouer
The cristallyne Heuen
The sterrie firmament
Saturne
Iuppiter
Mars
Sunne
Mercurie
Venus
Moone
THE LEARNED
DO APPOYNCTE THE ABITACLE OF

We may here beholde first the *Element.al* parte subiecte vnto alteracion, consisting of the foure *Elementes*, first *Earth* and *VVater*, whereon we are, then *Ayre* and *Fyer*. The other *Ethereal* part (which the *Phylosophers* call *quinte essence*) conteyneth the ten orbes: the bygger cumpasseth the nert lesser, as the figure before showeth. It begynneth at the *Moone*, then *Mercurie Venus*, &c. in hyght more and more. As the figure declareth *Saturne* to be the highest *Planete*: so is the *Moone* lowest.

The distaunce, or myles that the Moone is from the earth, and euery Planete from other.

AND some haue publyshed, it is from the earth to the *Moone*. 15750. myles.
From the *Moone* to *Mercurie*, is 12812. myles.
From *Mercurie* to *Venus*, as many myles.
From *Venus* to the *Sunne*, is 23437. myles & a halfe.
From the *Sunne* to *Mars*, is 15725. myles.
From *Mars* to *Iupiter*, is 78721. myles.
From *Iupiter* to *Saturne*, as many myles.
From *Saturne* to the firmament 120485. myles.
The whole summe from the earth to the firmament is, 358463 myles, and a halfe. Here *Demonstration* myght be made of the distaunce of these *Orbes*, but ỳ passeth the capacite of the cõmõ sort.

Hec incredibilia uidentur tãtum hiis, qui mathematicis demõstrationibus non assueuerunt. &c.

The natural operations of these *Planetes* by cõiunction, opositiõ &c. ensueth: But more largely of me opened in a pleasant boke, shortly to be publyshed. First here wil I ende the natural causes of many *Sunnes* and *Moones* then of the *Planetes* by coniunction.

The natural causes of many Sunnes, or Moones.

Milichius noteth the kyng of Pole to haue sene .6. Sunnes at ones.

THese come to passe, when a thicker cloude is gathered toward the side of the *Sunne* or *Moone*, in the whiche the broken beames of the *Sunne* do leaue the fashion and very forme of that *Sunne*. Thus as foloweth, sayeth *Plinius* in his seconde boke of the history of nature, and 31. chapter. No moe *Sunnes* are perceyued in our tyme then three: and they are neuer sene, either aboue

aboue or beneth the Sunne, but on the sydes: neuer in the myght, but onely at the Sunne ryſing, or going doune.

VVhat is to be chosen or avoyded under euery aſpect of the Moone: with her ſignification in the twelue Signes, touchyng the ſame.

THE coniunction, quadrature or oppoſition of Saturne with the Moone, cauſeth an euill vnlucky daye for all maters. Leaue therfore to haue to doo any maner waye: nothyng ſhall proſper, or come well to paſſe then attempted. Yet the Sextile or Trine of Saturne, with the Moone, declareth a conuenient tyme to til, delue or dygge, to ſowe, to laye foundacions, to erect or repayre houſes, yea a mete tyme to obtayne ſutes of fatherly fauours. The Moone in Capricornus or Aquarius, bryngeth this later effect of the ſextile and trine.

♄ ☌ ☐ vel ☍ cum ☽

♄ ✶ & △ cum ☽

☽ in ♑ vel ♒

The coniunction, ſextile, trine, quadrature or oppoſition of Iupiter with the Moone, ſheweth a fortunate daye, chiefly to obtayne ſutes of kynges, noble Princes, Prelates &c. of Lawyars and Religious perſones: and a mete tyme to ſtudy, to iourney, to take an honeſt mater in hande. The Moone in Taurus, in Leo, or Sagitarius, ſheweth theſame.

♃ ☌ ✶ △ ☐ vel ☍ cum ☽

☽ in ♉ ♌ vel ♐

The coniunction, ſertile, trine, quadrature or oppoſition of Mars with the Moone, warneth the not to matche thy ſelfe that day with warriours: notwithſtanding very good, and moſte mete to fynyſhe all maner fyry workes: naught to iourney: yet moſte conuenient for valiaunt captaynes to worke their feat, to leade, encourage or ſtomacke their ſouldiars: moſte vnmete to treate peace, to take ſeruauntes, or to ſeke frendſhyp.

♂ ☌ ✶ △ ☐ or ☍ cum ☽

The coniunction, quadrature or oppoſition of the Sunne with the Moone, declareth a very vnhappy daye for all maters: therefore attempt nothyng, ne any maner ſute: neyther plant, buylde, ne iourney. Yet the ſertile and trine are very fortunate, ſpecially to obtayne ſute of kynges, Princes, and other Nobles. The Moone in Aries enforceth the effect of this later part.

☉ ☌ ☐ vel ☍ cum ☽

☽ in ♈

♀ ☌ ✶ △ □ uel ☍ cum ☽ The coniunction, sertile, trine, quadrature or opposition of Venus with the Moone, causeth a daie moste apt to obtayne all sutes of women: good to woo, to attempte mariage, and to folowe all maner pleasures, and pleasaunt passtymes: not vnmete to hyre seruauntes, to let bloude &c. The Moone in Libra or Pisces, prouoketh the lyke.

☿ ☌ ✶ △ □ uel ☍ cum ☽ The coniunction, sertile, trine, quadrature, or opposition of Mercurie with the Moone, promuseth a fortunate happy daye, to bye and sell: very good to enter chyldren in Liberall artes: an apt tyme for the verifiar: good to vse marchaundyse, to iourney, to sende embassage, to geue accomptes and suche lyke.

☽ in ♊ ♋ uel ♍ The Moone in Gemini, Cancer or Virgo, enclyneth euen to thesame aforesayde.

☽ cum ☊ The Moone with the Dragons head, sheweth a lucky daye for all maters: with the Tayle contrary.

Now ensueth a Table shewyng what signe the Moone is in, and shall be for euer: declaryng also the meteste tyme to let Bloude, to Pourge, and to Bathe.

The Table hath at the head Seuen titles. The fyrst Monethes: the seconde Dayes: then the Prime: the twelue Signes: the titles to let Bloude, to Purge, and to Bathe.

Here it is to be noted, that those daies are good for these purposes, whiche be signed with this letter G: and those euell dayes, that are noted with B.

¶ This Table declareth for euer, in what Signe the Moone is or ſhall be at any daye in the yeare. It ſerueth alſo very well to let Bloud, to Purge, and Bathe.

Monethes.	Daies.	Prime.	The 12. Signes.	To let Bloude.	To Purge.	To Bathe.
Febr. Nouē.	1	3	Aries.	G	B	G
Marche.	2		Aries.	G	B	G
	3	14	Taurus.	B	B	B
Decembre.	4	6	Taurus.	B	B	B
	5		Gemini.	B	G	
Aprill.	6	17	Gemini.	B	G	
	7	9	Cancer.		G	G
Maie.	8	1	Cancer.		G	G
	9		Cancer.		G	G
	10	12	Leo.	B	B	G
	11	4	Leo.	B	B	G
Iune.	12		Virgo.	B	B	B
	13	15	Virgo.	B	B	B
Iuly.	14	7	Libra.			
	15		Libra.			
	16	18	Scorpius.		G	G
	17	10	Scorpius.		G	G
Auguſte.	18	2	Scorpius.		G	G
	19		Sagittarius.	G		G
	20	13	Sagittarius.	G		G
	21	5	Capricornus	B	B	B
Septembre.	22		Capricornus	B	B	B
	23	16	Aquarius.			G
Ianua. Octo.	24	8	Aquarius.			G
	25		Piſces.		G	G
	26	19	Piſces.		G	G
	27	11	Piſces.		G	G

A Table for lettyng of bloud. &c.

Seke out vnder the titles of the monethes, the name of the moneth, whose day you must loke out right against the moneth, vnder the title of daies: and there beginne to tell downewardes, *one, two, thre. &c.* to the ende, if it so require, and then from the begynning, if nede be, vntill you haue reconed the numbre of the day that you seke. Loke what numbre it falleth vpon in this table, vnder the title of *dayes:* that nũbre kepe in mynde. Then seke vnder the title of the prime, the golden numbre for that yeare: ryght against that lesstwarde, vnder the title of *daies*, begyn to tel downwardes, *one, two, thre. &c.* vntyll you haue reckoned the nũbre which you did kepe in minde. Against that towardes your ryght hande, vnder the title of *Signes*, is the signe wherein the *Moone* shalbe that daye. Euen then vnder the other titles, ye shall fynde in ryght order, for *letting bloude*, for *pourging* and *bathyng*, according as they be noted with G. whiche is good, and B signifieng badde. Ensample.

The first day of *Marche* in the yeare of our Lorde 1555. I desire to knowe what celestiall signe the *Moone* doth then occupie. I fynde first the name of the *Moneth*, that is *Marche*: and the daye as folowyth, in the next order of this table. I begynn here to tell ryghte against my moneth, at the figure of 2. saying *one, two, thre, &c.* so I haue at the ende, and compt of syx dayes this fygure 7. which I kepe in mynde. Nowe I must seke out the *Golden numbre* for the yeare aforsaid, vnder the title of the prime here, that is 17. against the whiche on the left syde is 6. There you must begynne agayne to compte, *one, two, thre, &c.* vntyll you come vnto your numbre 7. So on your right hande in the rowe, or order, you shall see *Virgo*, the celestiall *Signe* that the *Moone* is in: and after that these thre letters B whiche declare badde or euell to let *Bloud*, to *Purge* or *Bathe*, agreable to the titles in the head. G there had signified good.

For as muche as letting of *Bloude*, *Pourgyng*, and *Bathyng*, *Inundacions*, *Fluddes*, *Timbre fallyng*, *Sowyng*, *Planting*, *Graffyng*, *Cuttyng*. *&c.* depende chiefly on the *Signe* wherein the *Moone* is, which I haue euen before plainly opened, I thought it mete to haue thē nowe orderly touched, as folowyth.

A conducible note for letting bloude.

LEt bloude at no tyme without great cause, for it bryngeth weakenes and many infirmities. If ye do, se it be after good digestion, and fasting, in a fayre temperate daye. Beware before of al maner *exercise, bathinges, watchinges & carnall copulacion. &c.* After vse fyne meates, of lyght digestion, abstayning from all the afore sayde, vntyll the fourth daye.

Malum minui, uel purgationi bus uti, tempore caloris, propter defectum humoris.

These *Signes* are moste daungerous for bloud letting, the *Moone* beyng in them: *Taurus, Gemini, Leo, Virgo* and *Capricornus*, with the last halfe of *Libra*, and *Scorpius*. The rest are all good, so the *Moone* beare no dominion in that membre whiche ye cut: as followeth.

Ill to let bloud in ♉ ♊ ♌ ♍ ♑

Beholde the fygure.

The Dominion of the Mcone in mans bodye.

Aries.	THE	Head and face.
Taurus.		Necke.
Gemini.		Armes, handes, shoulders
Cancer.		Brest, stomacke, rybbes.
Leo.		Heart, backe.
Virgo.		Bowels, belly.
Libra.		Reynes, nauill, buttockes.
Scorpius.		Secret membres.
Sagittarius.		Thyes.
Capricornus.		Knees.
Aquarius.		Shynnes, legges.
Pisces.		Fete.

FRrom the *chaunge* to the *first quarter*, a mete tyme to let yonge men bloud.

From the *first quarter* to the *full*, good for middle age.

From the *full* to the *last quarter*, apt for aged folke.

From the *last quarter* to the *chaunge*, best for olde men.

Signes mete for the complexions.

ARIES. } For the *fleumatike*: the head, and thyes excepted.
Sagittarius. }

Libra. } For *melancholike*: buttockes and legges excepted.
Aquarius. }

Cancer. } For *Cholerike*: brest, membres, and fete excepted.
Scorpius. }
Pisces. }

For the *sanguine*, all be apt that tofore are named good.

Hec diligentissime observare oportet solertem Medicum, nisi maiora pericula cogant.

In the *spring tyme*, let bloud at the ryght syde.

In *Harueste tyme*, at the left syde.

The

The learned Phisician wyll consyder, beside all that is saide, the Coniunctions, Oppositions, and Quadrat affectes of the Planetes: with many other thynges Astronomical, most necessarie, both in bludletting, pourging, bathing. &c.

For to take purgacions, and to bathe.

THe meetest time to take purgations &c. is neither in hote, nor colde dayes: that is from the tenth of Marche, to the twelfthe of Iune.

Further by rules Astronomical, it must be performed when the Moone is in colde, moist, and watry Signes, as Cancer, Scorpius & Pisces: comforted by aspectes and radiatiõs of planetes, fortifieng the vertue of the body expulsiue. *Good to purge* ♋ ♏ ♓

The Moone in Aries, Taurus, and Capricornus, naught. One cause of vomiting the purgation is if the Moone haue aspect to any planet retrograde. *Bad to purge.* ♈ ♉ ♑

The Moone in these Signes folowyng, very good to bathe: Aries, Leo Sagittarius, Cancer, Scorpius, and Pisces. *Good to bathe.* ♈ ♌ ♐ ♋ ♏ ♓

These ensuyng are euill to bathe: Taurus, Virgo, and Capricornus. *Bad to bathe.* ♉ ♍ ♑

Of Inundations or fluddes: of tymbre fallyng, sowyng, planting, graffyng, heare cluppyng, shauing, and geldyng.

THe fludde is byggest at the full: because then dispersyng her vertue, she fylleth all places with moysture. By common experience, ioyned with learnyng I knowe, at the ful the Moone lodeth all bodies with humours: and so are emptied, growyng to the change. Of this, some gather the fall of tymbre at the chaunge, more to the purpose then other tymes: wantyng then superfluous moysture, the cause of putrefaction. *Omnis putredo ab aqueo humido ortum habet.* Schoner willeth from the. 15. daye vnto the. 22. daye of the Moone, trees to be felled, and that after Mydsommer to Ianuarie. So tymbre is strong, sounde, and voyde of wormes. *The fall of tymber.*

To Sowe, Taurus, Cancer, Virgo, Libra, and Capricornus, are best, in the increace of the Moone. *Good to sowe.* ♉ ♋ ♍ ♎ ♑.

To Plante or Graffe, is best when the Moone hath her being in any fired Signe, either in Taurus or Aquarius, in the encrease. *To plante or graffe.* ♉ ♒

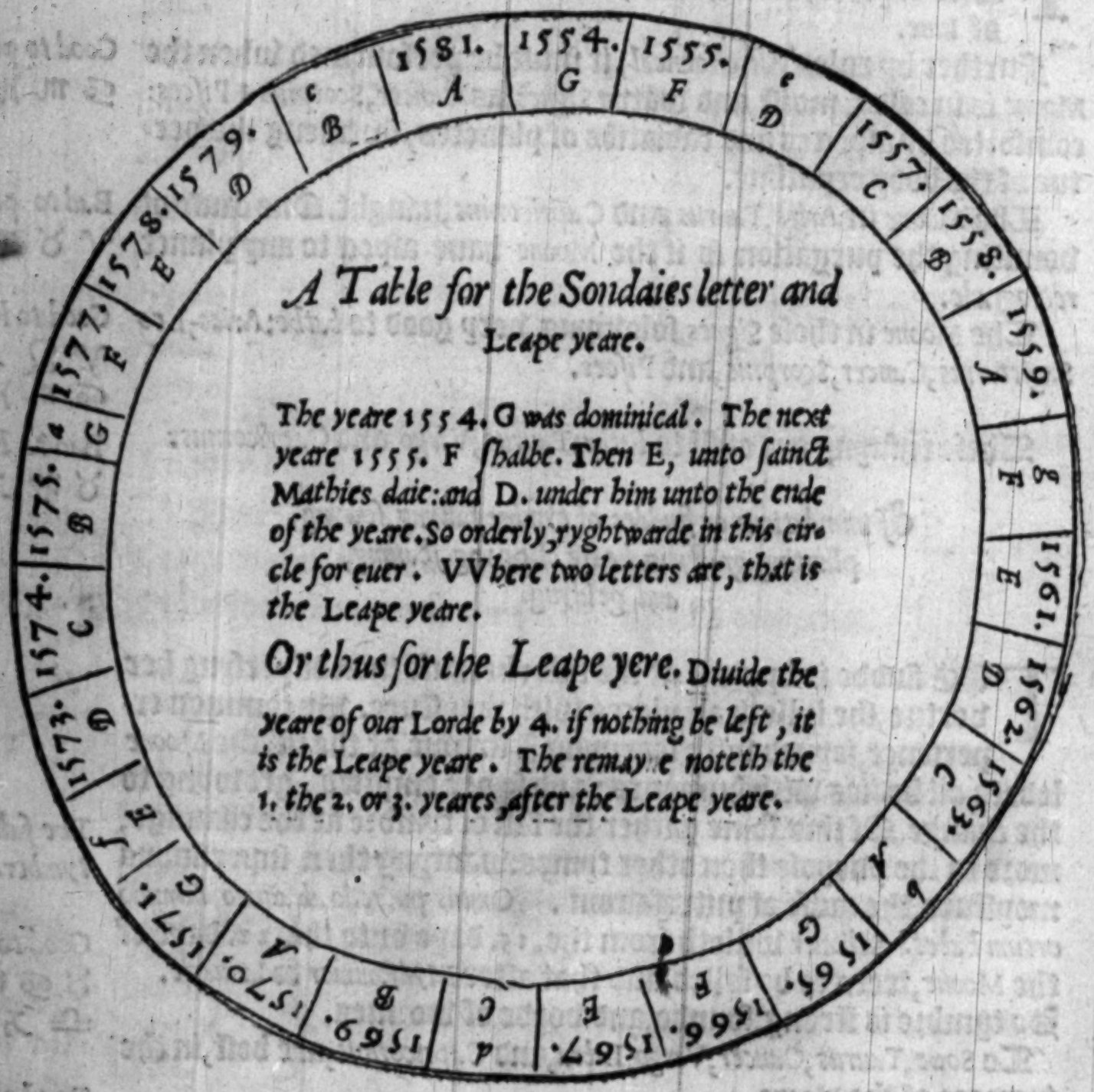
Heare cut groweth well, the Moone encreacing, being in Taurus, Virgo or Libra. *To cut heare.* ♉ ♍ ♎

Cutting

Cutting, Shauing, Clipping, in the wane causeth baldnes: what is then cut, groweth litle. *Caluitium prohibet oleum Tartari.*

The best tyme of Cutting is in Cancer, Scorpio, or Pisces, in the wane.

These two rounde Tables that nowe ensue conduce to the rest folowyng.

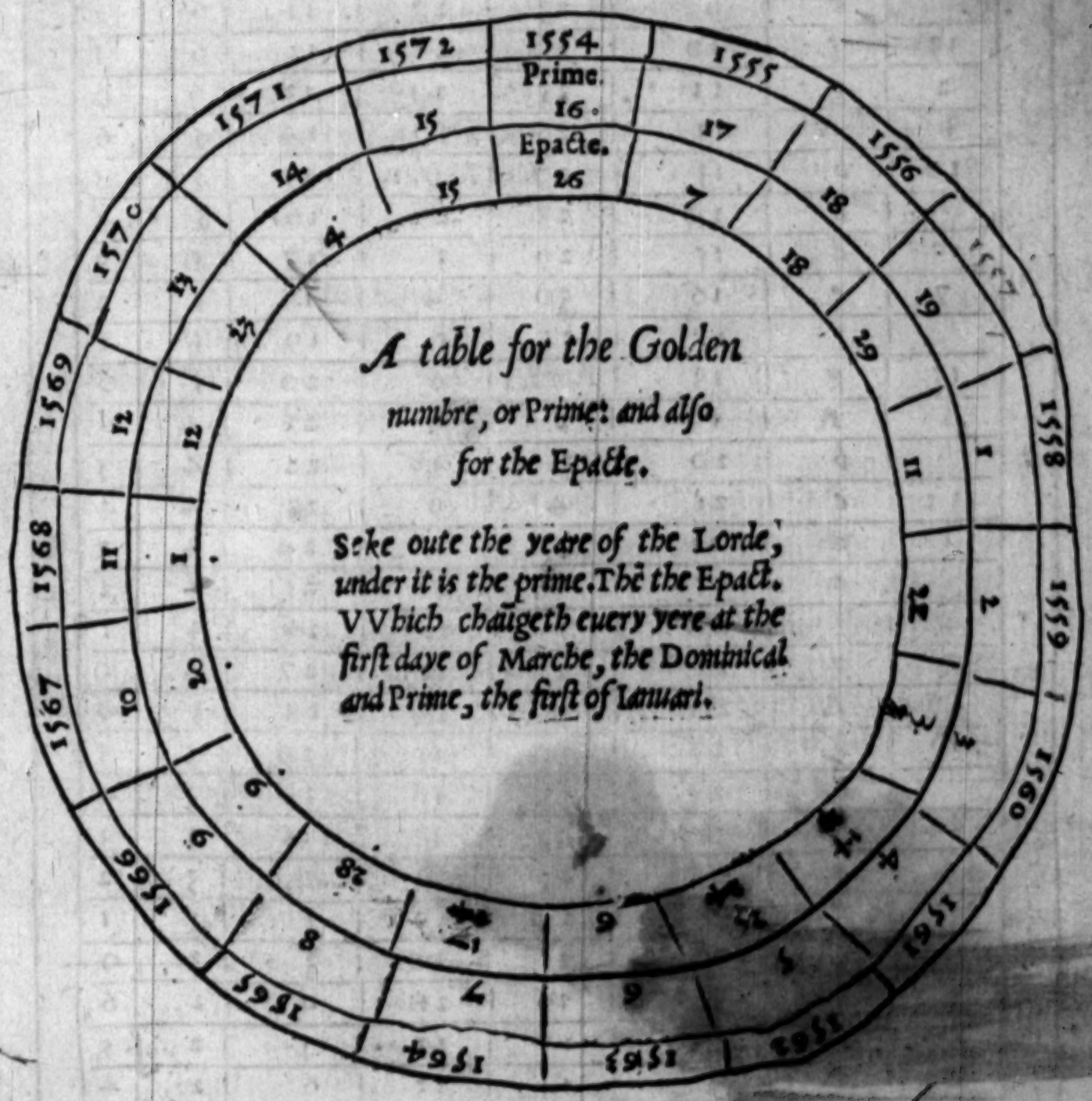


A Table for the Sondaies letter and Leape yeare.

The yeare 1554. G was dominical. The next yeare 1555. F shalbe. Then E, unto sainct Mathies daie: and D. under him unto the ende of the yeare. So orderly, ryghtwarde in this circle for euer. VVhere two letters are, that is the Leape yeare.

Or thus for the Leape yere. Diuide the yeare of our Lorde by 4. if nothing be left, it is the Leape yeare. The remayne noteth the 1. the 2. or 3. yeares, after the Leape yeare.

VVhen ye haue gone rounde about the Yeares: these two Tables begynne agayne.



A Table for Mouable feastes.

The prime.	The sondaies letter.	The first Lent sonday.	Easter daye.	Rogation.	whitsontide.	Betwixt whitsond. & midso. wek. daies
16		Februarie.	Marche.	April.	Maye.	6 3
5	d	8	22	26	10	6 2
	e	9	23	27	11	6 1
13	f	10	24	28	12	6 0
2	g	11	25	29	13	5 6
	A	12	26	30	14	5 5
10	b	13	27	May. 1.	15	5 4
	c	14	28	2	16	5 3
18	d	15	29	3	17	5 2
7	e	16	30	4	18	5 1
	f	17	31	5	19	5 0
15	g	18	April. 1	6	20	4 6
4	A	19	2	7	21	4 5
	b	20	3	8	22	4 4
12	c	21	4	9	23	4 3
1	d	22	5	10	24	4 2
	e	23	6	11	25	4 1
9	f	24	7	12	26	4 0
	g	25	8	13	27	3 6
17	A	26	9	14	28	3 5
6	b	27	10	15	29	3 4
	c	28	11	16	30	3 3
14	d	Marche. 1.	12	17	31	3 2
3	e	2	13	18	Iune. 1.	3 1
	f	3	14	19	2	3 0
11	g	4	15	20	3	2 6
	A	5	16	21	4	2 5
19	b	6	17	22	5	2 4
8	c	7	18	23	6	2 3
	d	8	19	24	7	2 2
	e	9	20	25	8	2 1
	f	10	21	26	9	2 0
	g	11	22	27	10	1 6
	A	12	23	28	11	1 5
	b	13	24	29	12	1 4
	c	14	25	30	13	

The use of this Table appointed for the mouable Feastes.

THis *Table* conteyneth in the first title the *Prime*: in the seconde, the *Dominical letter*: in the thirde, *Lent*, in the fourth *Easter daie*, in the fifth, *Rogation daie*, in the sixte, *VVhitsondaie*: in the seuenth, how many weakes and daies are betwene *VVhitsondaie* and *Midsomer*. Whiche all appeare by their titles.

Ye shall consider by the litle rounde *Table* before put forth, what numbre the *Prime* is that yeare, whereof ye require to knowe all these aforesayde: and seke that numbre vnder the first title of this *Table* ensuyng. Then seke vnder the seconde the *Dominical* letter next after the *Prime* for that yeare: whiche title ensueth the *Prime*. Directly against thesame *Dominical letter*, towardes youre ryght hande, in thesame lyne, ye shal fynde vnder the titles, what *Moneth* and *daie*, euery one of these aforesayde shall happen.

Ensample.

I would knowe this yeare of our Lorde 1555. these moueable feastes: the first *Lent sondaie*, *Easterdaie*, *Rogation daies*, *VVhitsondaie*, and howe many weakes betwyxt *VVhitsondaie*, and *Midsomerdaie*. First I fynde the *Prime* this yeare 17, which 17 I loke out vnder the title of *Prime* in the *Table* before. Then I seke in the next ordre, and after the *Prime*, for the *Dominical letter* that yeare. Nowe in ryght order, according to the titles, I fynde the thirde of *March* to be the first *Lentsondaie*: the 14 of *April Easterdaie*: the 19 of *May*, *Rogation*: the 2 of *Iune*, *VVhitsondaie*: and 3. wekes, and 1. daye betwixt *whitsonday*, & *Midsomerday*. Thus for euer.

Howe to knowe the age of the Moone: then the chaunge, and quarter for euer.

By the Prime the chaunge is knowen, but uncertaynly: therefore here omitted.

FYrst learne the *Epact* (as I haue instructed) for that yeare ye seke to knowe the age of the *Moone*, then reken howe manye dayes is past of that moneth, whiche daye ye desyre to knowe the age. Put that numbre to the *Epact*. Then begyn at *Marche*, and reken for euery moneth from hym orderly one, vntill your sayd day, including both the moneth of *Marche*, and also the moneth of your sayd daye. Adde all these dayes vnto your former numbre: putting awaye as many *thyrty daies*, as ye fynde. The rest, is the age of the *Moone*. The Age founde, the *chaunge* is knowen. If ye adde 7 days to the *chaunge*, ye haue the fyrst quarter: then 7 dayes, and somwhat more, sheweth the *full*: and so to it addyng 7 and more, bringeth the *last quarter*: thus by 7 vnto the newe *Moone*.

Ensample.

In anno Bisextili unum adde

The 10 daye of *Ianuarie*, the yeare then beyng 1555. I desire the age of the *Moone*. I fynde the *Epact* vntyll *Marche* ensuyng to be 26, that added vnto 10 maketh 36 then a 11 for the monethes from *Marche* to *Ianuarie*, including both Monethes, bryngeth 47: nowe 30 pulled awaye, leueth 17 the age of the *Moone*.

Nowe ensue two perfecte Tables, declaryng the trew Houre and minute of Ebbing and Flowing, in moste coastes of Englande.

Quin South-ampton. Ports-moth.	Redban Aberdē	Graues ende.	Dūdee. S. And.	Age of the Moon	London Tinmot Hertle pole.	Ber-wyke.	Erith. Lythe. Dūbar	Falmot
South.	S b w.	S S w.	S w b S		S w.	S w b w	w S w	w b S.
H. M.	H. M.	H. M.	H. M.	☽	H. M.	H. M.	H. M.	H. M.
12 48	1 33	2 18	3 3	1	3 48	4 33	5 18	6 3
1 36	2 21	3 6	3 51	2	4 36	5 21	6 6	6 51
2 24	3 9	3 54	4 39	3	5 24	6 9	6 54	7 39
3 12	3 57	4 42	5 27	4	6 12	6 57	7 42	8 27
4 0	4 45	5 30	6 15	5	7 0	7 45	8 30	9 15
4 48	5 33	6 18	7 3	6	7 48	8 33	9 18	10 3
5 36	6 21	7 6	7 51	7	8 36	9 21	10 6	10 51
6 24	7 9	7 54	8 39	8	9 24	10 9	10 54	11 39
7 12	7 57	8 42	9 27	9	10 12	10 57	11 42	12 27
8 0	8 45	9 30	10 15	10	11 0	11 45	12 30	1 15
8 48	9 33	10 18	11 3	11	11 48	12 33	1 18	2 3
9 36	10 21	11 6	11 51	12	12 36	1 21	2 6	2 51
10 24	11 9	11 54	12 39	13	1 24	2 9	2 54	3 39
11 12	11 57	12 42	1 27	14	2 12	2 57	3 42	4 27
12 0	12 45	1 30	2 15	15	3 0	3 45	4 30	5 15
12 48	1 33	2 18	3 3	16	3 48	4 33	5 18	6 3
1 36	2 21	3 6	3 51	17	4 36	5 21	6 6	6 51
2 24	3 9	3 54	4 39	18	5 24	6 9	6 54	7 39
3 12	3 57	4 42	5 27	19	6 12	6 57	7 42	8 27
4 0	4 45	5 30	6 15	20	7 0	7 45	8 30	9 15
4 48	5 33	6 18	7 3	21	7 48	8 33	9 18	10 3
5 36	6 21	7 6	7 51	22	8 36	9 21	10 6	10 51
6 24	7 9	7 54	8 39	23	9 24	10 9	10 54	11 39
7 12	7 57	8 42	9 27	24	10 12	10 57	11 42	12 27
8 0	8 45	9 30	10 15	25	11 0	11 45	12 30	1 15
8 48	9 33	10 18	11 3	26	11 48	12 33	1 18	2 3
9 36	10 21	11 6	11 51	27	12 36	1 21	2 6	2 51
10 24	11 9	11 54	12 39	28	1 24	2 9	2 54	3 39
11 12	11 57	12 42	1 27	29	2 12	2 57	3 42	4 27
12 0	12 45	1 30	2 15	30	3 0	3 45	4 30	5 15
North.	N b E	N n E	N e b N	☽	N E	N e b E	E n E	E b N.

The first table of Tydes.

Foy Lin. Hũber. weimot. Dertm. Plimot.		Brifto.		Milfo. Bridg- water.		Portl. Peter. porte.		Age of the Moone.	Orkn. Pole. Or- wel.		Diep. Lux. Le- noys.		Boloig. Douer. Harwick Yarmot.		Calice.	
Eaſt.		E b S.		E s E		S e b E			S E		S e b S		S s E		S b E	
H.	M.	H.	M.	H.	M.	H.	M.	☽	H.	M.	H.	M.	H.	M.	H.	M.
6	48	7	33	8	18	9	3	1	9	48	10	33	11	18	12	3
7	36	8	21	9	6	9	51	2	10	36	11	21	12	6	12	51
8	24	9	9	9	54	10	39	3	11	24	12	9	12	54	1	39
9	12	9	57	10	42	11	27	4	12	12	12	57	1	42	2	27
10	0	10	45	11	30	12	15	5	1	0	1	45	2	30	3	15
10	48	11	33	12	18	1	3	6	1	48	2	33	3	18	4	3
11	36	12	21	1	6	1	51	7	2	36	3	21	4	6	4	51
12	24	1	9	1	54	2	39	8	3	24	4	9	4	54	5	39
1	12	1	57	2	42	3	27	9	4	12	4	57	5	42	6	27
2	0	2	45	3	30	4	15	10	5	0	5	45	6	30	7	15
2	48	3	33	4	18	5	3	11	5	48	6	33	7	18	8	3
3	36	4	21	5	6	5	51	12	6	36	7	21	8	6	8	51
4	24	5	9	5	54	6	39	13	7	24	8	9	8	54	9	39
5	12	5	57	6	42	7	27	14	8	12	8	57	9	42	10	27
6	0	6	45	7	30	8	15	15	9	0	9	45	10	30	11	15
6	48	7	33	8	18	9	3	16	9	48	10	33	11	18	12	3
7	36	8	21	9	6	9	51	17	10	36	11	21	12	6	12	51
8	24	9	9	9	54	10	39	18	11	24	12	9	12	54	1	39
9	12	9	57	10	42	11	27	19	12	12	12	57	1	42	2	27
10	0	10	45	11	30	12	15	20	1	0	1	45	2	30	3	15
10	48	11	33	12	18	1	3	21	1	48	2	33	3	18	4	3
11	36	12	21	1	6	1	51	22	2	36	3	21	4	6	4	51
12	24	1	9	1	54	2	39	23	3	24	4	9	4	54	5	39
1	12	1	57	2	42	3	27	24	4	12	4	57	5	42	6	27
2	0	2	45	3	30	4	15	25	5	0	5	45	6	30	7	15
2	48	3	33	4	18	5	3	26	5	48	6	33	7	18	8	3
3	36	4	21	5	6	5	51	27	6	36	7	21	8	6	8	51
4	24	5	9	5	54	6	39	28	7	24	8	9	8	54	9	39
5	12	5	57	6	42	7	27	29	8	12	8	57	9	42	10	27
6	0	6	45	7	30	8	15	30	9	0	9	45	10	30	11	15
VVeſt.		w b n		w n w		n w b w		☽	n w		n w b n		n n w		n b w	

ſeconde of tydes

The use of thees Tables.

When you wyll know the *full Sea*, seke out the name of the place, where you desyre the ful water, in the head of the tables: Or learne the pointes of the cõpas there noted: Or if you lyste, know of some Mariner, what *Moone* maketh a full Sea there: a *South west* or *South Moone*. &c. Then the *age* of the *Moone* founde vnder the place or poynt of the compasse, sheweth in ryght order the *houre* & *Minute* of the *ful water*. The *ebbe* then is manifest. Of Ebbyng and Flowyng.

Ensample.

I desyre to knowe the full water at *London bridge*, the yeare of our Lorde 1555. the first daie of *Februarie*. I fynde by rules before put forth, the 6 daye of *Februarie*, the yeare aforesayde, the *Moone* to be 14 daies olde. I see also vnder the title where *London* is S W. whiche letters signifie that a South west *Moone* maketh a *ful Sea* there: and that is at 2 of the clocke, and 12 minutes past. This is well perceaued in the first *Table* before put fourth, if you rüne down to the 14 day of the age of the *Moone*, vnder Lõdon title.

A Note of the houre of the daye and nyght.

The ingenius may gather nere about the houre of the daye & nyght, by the *Moone*: cõsideration had of the poyntes in those *Tables* of tydes before noted. For the houre is orderly put vnder the poyntes of the compasse.

Euery parte or poincte contayning 11 degrees and $\frac{1}{4}$: this compasse is well figured nere about the *Centre* in the instrument folowyng for the nyght houre, because ye may by it haue a delectable large vse of thees tyde tables.

How by the first of the tide tables, ye may readly knowe when the Moone cometh unto the South, when she riseth and setteth: with her continuaunce on the earth.

Seke the age of the *Moone* (as is opened) then resorte to the first *Tide table* loking out that age there: So vnder the *South* poinct in right order the houre appeareth, when she cometh vnto the *South*. Thẽ hath she spent half that arcke that the *Sunne* wold haue had in that *Signe*, whiche pulled away, sheweth the rysing: that half arcke also added to her coming vnto the *South* declareth her going down. The arcke then that the *Sunne* would haue had in the *Signe*, is her continuaunce on the earth.

A Table at all times plainly and briefly declaring, The breake of the daye: the houre and minute of the Sunne rysing. the iust length of the daye: the length of the nyght also: the very minute of the Sunne setting: and the Twylight.

Monethes	Dayes.	Break of the day. H.	M.	Sunne rysinge. H.	M.	Lengthe of the day H.	M.	Lēgthe of the night H.	M.	Sunne settinge. H.	M.	Twylyghte. H.	M.	Dayes.	Monethes.	Minutes to be added, to the Lēgth of the daye.
ber.	10	6	0	8	11	7	37	16	23	3	49	6	0	10	Dec.	
	20	5	58	8	10	7	40	16	20	3	50	6	2	1		3
Ianu.	1	5	54	8	0	8	0	16	0	4	0	6	6	20	Nouē.	3
	10	5	44	7	49	8	21	15	39	4	11	6	16	10		7
	20	5	35	7	34	8	52	15	8	4	26	6	25	1		5
Febr.	1	5	15	7	13	9	34	14	26	4	47	6	45	20	Octo.	5
	10	5	0	6	56	10	8	13	52	5	4	7	0	10		8
	20	4	50	6	36	10	47	13	13	5	24	7	10	1		5
Mar.	1	4	20	6	19	11	22	12	38	5	41	7	40	20	Septeē.	13
	10	4	0	6	1	11	58	12	2	5	59	8	0	10		16
	20	3	40	5	41	12	37	11	23	6	19	8	20	1		13
Apr.	1	3	8	5	18	13	23	10	37	6	42	8	52	20	Aug.	12
	10	2	40	5	1	13	57	10	3	6	59	9	20	10		15
	20	2	10	4	43	14	33	9	27	7	17	9	50	1		11
May.	1	1	30	4	25	15	9	8	51	7	35	10	30	20	Iul.	13
	10	0	30	4	12	15	35	8	25	7	48	11	30	10		13
	20	Cōtinu: all day.		4	0	15	59	8	1	8	0	Day continuall.		1		7
Iu-	1			3	51	16	17	7	43	8	9			20	ne.	3
	10			3	48	16	23	7	37	8	12			10		
		H.	M.	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.			

The vse of this table.

Consider the Moneth and day, that ye require any of the toforesayd: and seke in this Table that same under the titles: procede in ryght ordre, so ye haue your purpose. If the uery day be not founde, take the nearest of your table. ¶ Or by proportion the truthe is geuen: whiche all by Ensample folowyng shall playnly be declared.

Ensample.

The first daie of *Lanuarie*, I desire all the aforesayde: that is, *the breake of the daie*: the very minute of the *Sunne rysing*: the *length of the daie*, and also of the *nyght*, the *Sunne goyng downe*, and the *twylight*. I synde on the ryght hande of *Lanuarie*, these numbres runnyng doune, 1. 10. 20. whiche declare the first daye, the tenth daye, and twenty of that Moneth. Nowe to my purpose, I require the *breake of the daye. &c*. The first of *Lanuarie*, in the *Table*, vnder that title, on the ryght hande of this fygure 1. I see 5. houres, and 54. minutes, that is 6 of the clocke wantyng 6 minutes. The *rysing* of the *Sunne* in that order, is iust at 8 as this figure 8 there declareth vnder that title in the rowe. The *length of the daie*, 8 houres: the *length of the nyght* 16 houres: the *Sunne settyng* is at 4: the *twilight*, at 6 and 6 minutes. Euen thus for the tenth day, and also for the twenty of that Moneth, in the rowes accordyng to their titles in the head of my *Tables*.

Howe to worke by proportion, when the daye is not founde.

I Would knowe all thaforesayde, the first daye of *Lanuarie*. I take for ensample the *breake of the daie*. Remember the first daye of *Lanuarie*, I dyd synde the *breake*, to be at 5 of the clocke, and 54 minutes: and the tenth daye I may synde the *breake of the daie* to be at 5 and 44 minutes, that is 10 minutes lesse. I see nowe 10 daies do geue me 10 minutes lesse. I saye therfore (by *proportion*) the fifth day must geue 5 minutes lesse then 5 houres 54 minutes: which is 5 houres, 49 minutes my request. Thus for all the other titles.

The houre of the nyght, by the Moone: is otherwyse founde then before and that diuersly.

How by the Moone, the night houre is founde.

THe *houre* of her rysyng knowen, as is opened, & a marke then made where she shadoweth, in any true fixed or mouable *Sūne Dial*, the houres and minutes from that marke all the nyght after, are to be added to her rysyng. If more then 12. surmounte, onely that aboue 12 sheweth the true houre and minute. If at the rysyng she may not be sene, then by the *Sunne* rysing, in that very *Signe* (with the helpe of this *Almanack*) you may perceiue what houre she would note at her rysing. Therfore from that marke counte.

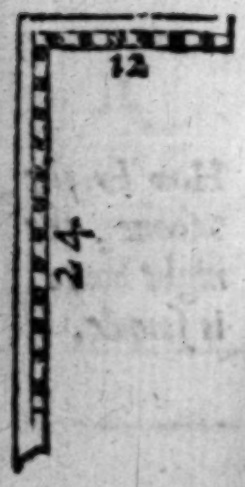
An other waye.

VVhen the *Moone* is at the full, looke what *houre* her ſhadowe ſheweth in any *Dial*, that is the houre of the nyght. After ſhe be paſt the full 28 houres, ye muſt adde one *houre*: But afore the full, pull one from that ye fynde in the *Dial*. If twyſe 28, two *houres* &c. So haue ye the *houre* of the nyght.

How the houre of the day, by Ryght ſhadowe, that is by any thyng directly ſtandyng up, is knowen: and by Squyre ſhadowe alſo.

FIrſt it behoueth you to haue a *Staffe*, or any other thing diuided in 12 equal partes. Whē ye liſt to haue the houre, Set vp directly your diuided *Staffe*, on a playne leuell grounde, or bourde &c. Note the iuſt length of that ſhadowe, what partes it contayneth. With thoſe enter your Moneth in the Peculiar *Kalender* folowyng: beholdyng dilygently vnder the name of that Moneth, the ſmall encloſed *Tables*: conſidering well, whiche of thoſe ſmal *Tables* are nereſt vnto your day: and that iudge by the Signe, or daye there noted. That table ſerueth your purpoſe: where you muſt loke out the partes of the ſhadow afore founde, or nere vnto it: vnder or ouer the whiche the houre is ſet, before or after noone. Note that *two prickes* there ſignifie half a part more than is noted: *one pricke*, half a part leſſe. Here it is alſo to be noted, that euery *Table* hath within, *two rowes of figures*: the vpper is for the *Staffe*, the other for the *Squyre ſhadowe*. And whatſoeuer is before ſayde of the one, that ſame is ment here of the other, ſauyng of the *Compoſition*.

The *Squyre* muſt be diuided from the inward angle to the ende of one ſide, in 12 equal partes: euen ſo from that angle the other ſide into 24 lyke partes, as this figure ſheweth.



Theſe to the wytty ſuffyſe.

The Compoſition of an Inſtrument, for the houre of the nyght: whiche is alſo a perfect Dial for the daye, and excellent for the Mariner.

THe takyng of an *Altitude* ſuppoſed, I could exactly in fewe (and that without an *Inſtrument*) ſatiſfie. For wat of that knowledge, make vpon a playne bourde, or rather fine plate a Circle: the bigger the better, part it into 360 portions, thus.

The

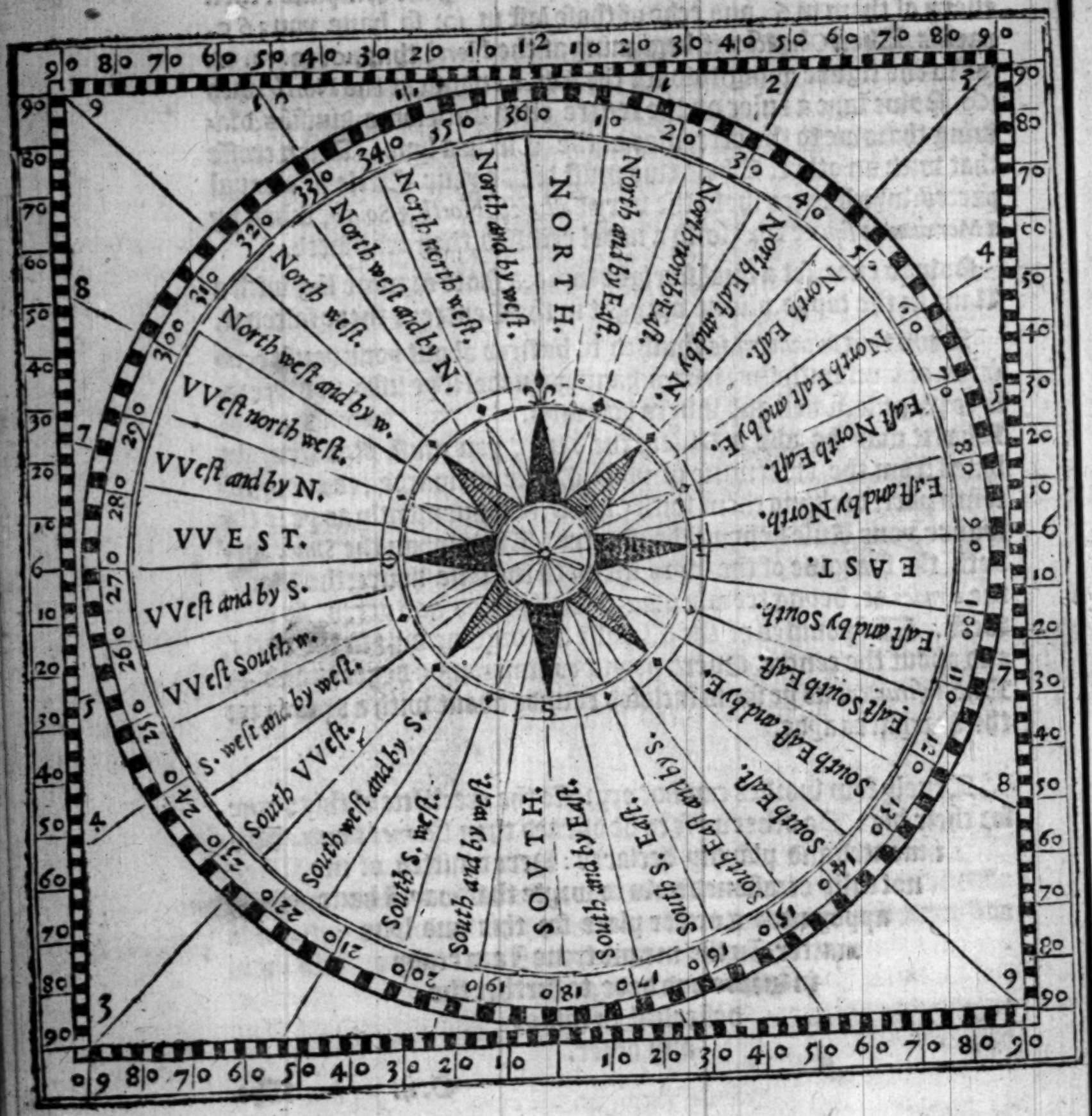
The Circle made diuide it in 6 not mouing the compasse: then euery of them in 6, and eche of those last in 10: so haue you 360. partes. Then *Character* it, beginning at the *North* thus. 10. 20. 30. &c. (as in the figure going) toward the *East*, & ending at the *North* with 360. Nowe laye a ruler on the centre, euen with some diuisiõs, drawing thorowe to the extremes of the Circle a lyne. Then crosse that with an other. These two must diuide your Circle in 4 equal partes: which lynes shew the very *East*, *west*, *North*, & *South*, when by a *Meridian* or *square Dial*, with a nedel rectified, they are placed.

Now to ende, set a smal streight wyre, a foote or more lõg with a Vane in the toppe, plũme vpryght in the Centre: & there fasten it.

Thus this *Instrument* is finished, to be fixed about your house *equidistant* or leuil with the *Horizon*: hauing a nedel if ye liste, in it, trewly to plage it, when and where you wyll.

That it may be also a *Dial* for the daye, you must pull streyght lynes from the extremitie of your Circle outwarde, to euery fiftenth part: decking them with *Characters* conueniently as ye se the fygure, your Rule kepyng the Centre. Thus whan the *Sunne* shyneth, the shadowe of the wyre, sheweth the true houre: the Vane, the *wyndes* &c. beyng trewly plaged, well placed, and rered, as followeth. The poinctes of the Cũpasse are drawne within the circle, and about the centre. Euery poynct contaynyng 11 degrees and $\frac{1}{4}$. The *Instrument* as ye see is inclosed rounde about with a *Square*: for the Maryners ayde.

Truely few wordes can not expresse the excellẽcie of this *Square* for their vse: No otherwyse to be opened then *Learned Gemma* hath inuented and playnly declared: Here omitted of me, not fully occasioned now to wryte that way. I haue appoynted a meter place for this and lyke matter. In the meane tyme I am ready in worde and dede, to further the desierfull in this or any other.



Beholde this Inſtrument for nauigation moſte commodious, the uſe of the whiche, is here onely put forth accordyng to my Inuention.

The ryght reryng and placing of the Dial tofore mencioned.

LIft vp handesomely your *Instrument* or *Dial* towarde the North in some mete place, the syde of a squyre lyng on it, vntyll the plummet and lyne, centred in the extreme vpper part of the other syde of your squyre lyke long, cut all that squyre syde, which lyeth on your Instrument, the fifth part onely except. *In wynter the contrarie superficies or playn: sheweth the day houre frõ ♎ to ♈.*

Then moue your Instrumẽt, hyther and theder, this or that waie, vntyll the shadowe of the wyre fall vpon the houre of the daye, keppyng diligently your heyght before. Your *Dial* thus fired declareth all the yeare long, the exacte houre and partes thereof. No *Dial* in truth excelleth this. Haue in remembraunce, that this instrument must lie leuel, nothyng at all rered, for the houre of the nyght by sterre.

To get the exacte houre by two Sterres of the first lyght, with an Instrument or Circle, tofore diuided, first of me inuented, calculated and practised.

THE *Instrument*, equidistantly set and plaged, as is declared in the composition, ye ought to laye the edge of a ruler vnto the wyre, the other nether ende touching the instrument, mouing here and there, styll touchyng the wyre, vntyll eyther *Sterre* doth offer it selfe with that edge, and that by the Iudgement of the eye. Then put downe discretely your ruler (euer touchyng the wyre) the hinder ende not moued, obseruing how many partes are cut from the *North*, to the edge of the ruler. Enter with them the Peculiar *Kalendar* folowyng: sekyng out your *Moneth*, placed in the myddes of euery *Table*: then the daye of that moneth must be there founde. *Fit filo aut digito, absque regula exactissime.*

Note that, euery table hath on the sydes, the daies thus ordered 1. 5. 10. 15. 20. 25. 30. Knowe that order or rowe of fygures, whiche is right against, or nerest your day, serueth the turne. The numbre or partes before cut by the *Ruler*, and now founde in that rowe of your table, sheweth the precise houre. If it be to litle, that houre ouer the head or vnder is not yet come: if contrary, it is past.

Howe theſe two bryght Sterres, beyng of the fyrſt lyght are founde: the one called Aldebaran or Oculus Tauri, the other Alramech.

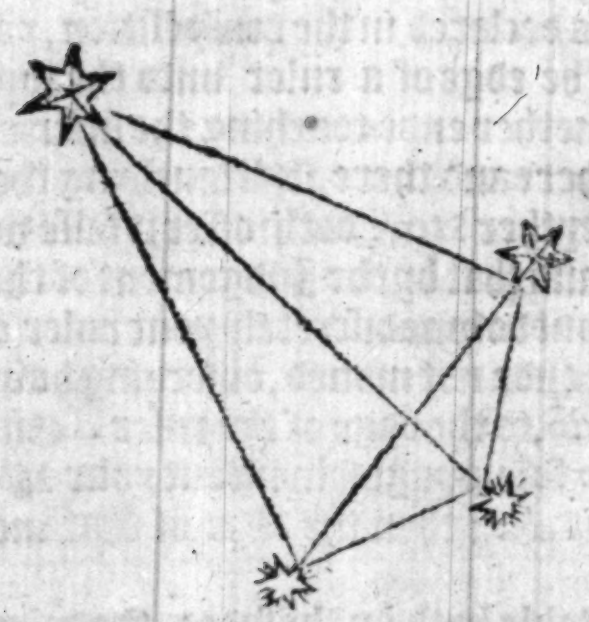
By what meanes theſe Sterres are knowē.

THE beſt waye is thus: The *Moneth* and *daie* knowen, with the trewe *houre* of the *nyght*, entre your Table, conſidering that *Moneth* and *daie*: obſerue what partes belonge there to that Sterre and *houre*. Then reſort to your *Inſtrument*, layeng the edge of your ruler, as many partes from the *North Eaſtwarde*, circumſpectlye lyftyng vp that edge, cloſe by the wyre: ſo the ſayde Sterre ſhyneth euen with that edge.

Or thus groſſely.

An other waye to finde them.

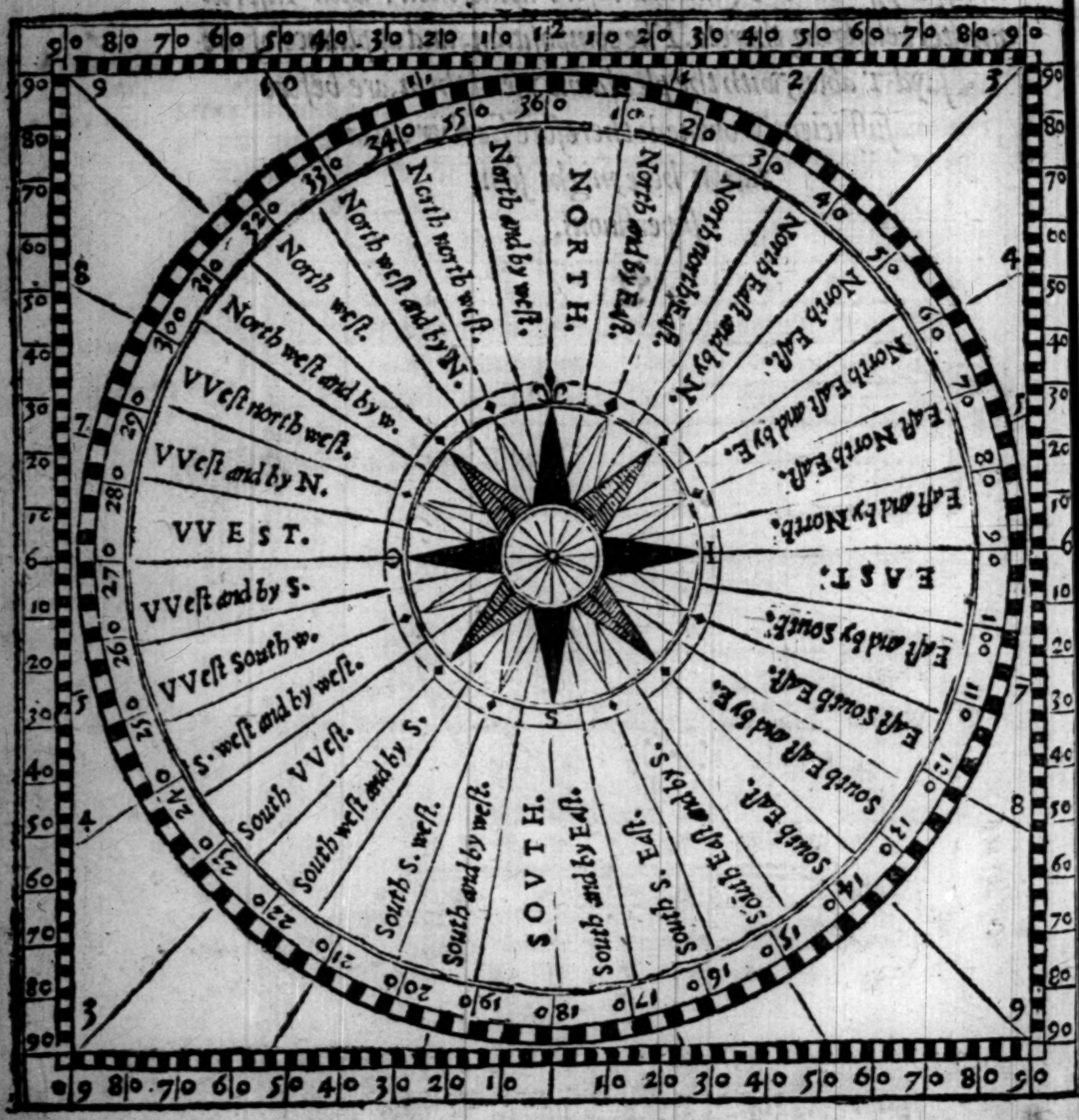
Oculus Tauri is euer a meaterodde, and a half to the eie vnder the 7 Sterres, and ſomewhat *North* of them in the ryſing. *Alramech* is contrarie to him plaged, accompanied with three litle dimme Sterres, a rodde from him by the iudgement of the ſight: in the foyme of a *Triangle* thus.



Beholde this figure, the great Sterre doeth repreſente Alramech: the other three, the Triangle: whiche is placed alwayes with him. But commonly there doth appeare but one Sterre of the Triangle.

NOVV ENSVETH THE NEDEFVL
neceſſary, peculiar Kalender tofore mencioned: with Inſtru-
mentes belonging thereto. The compoſition, and appliance of the
ſayd Tables, with the pleaſaunt vſe of them, are before
ſufficiently opened: therefore further decla-
ration here, might ſeme
ſuperfluous.

A neceſſary Inſtrument, to finde exactely the houre of the daye and nyght, diuerſe wayes, with helpe of this Peculiar Kalender.



	5	6	7	8	9	10	11	12	
1	108	123	143	165	190	213	59	79	
5	112	129	150	172	197	220	63	74	Oculus Tauri.
10	118	136	158	183	206	227	68	78	
15	123	144	166	192	214	233	71	81	
20	130	151	173	199	220	239	75	86	Alramech.
25	137	158	185	207	228	244	79	90	
30	144	165	191	213	233	249	82	93	

For the nyght. — *From euening to midnight.*

Ianuary hath. xxxi. dayes.

81	93	105	121	143	168	196		1
86	96	110	127	151	177	205		5
89	101	116	135	160	189	214		10
93	105	122	143	169	198	223		15
98	111	128	152	179	207	230		20
101	116	135	159	190	216	236		25
190	121	144	168	198	222	242		30
1	2	3	4	5	6	7		

From midnight vnto day. — *For the nyght.*

For the day.

	12	11	10	9	8	7	H	
10 Staffe	36:	39	49:	83	550	0		shad. 0
10 Squire	4	4.	3	2.	0	0		shad.
H	0	1	2	3	4	5		

	12	11	10	9	8	7	H	
20 Staffe	32.	34	42	65:	209	0		shad. 10
20 Squire	4:	4	3:	2	1.	0		shad.
H	0	1	2	3	4	5		

	12	11	10	9	8	7	H	
30 Staffe	27:	29.	35:	52	119	0		shad. 20
30 Squire	5	5.	4	3	1:	0		shad.
H	0	1	2	3	4	5		

	6	7	8	9	10	11	12	
1	169	194	216	62	73	83	95	
5	174	199	222	64	75	86	98	
10	184	207	228	68	79	90	102	
15	191	214	234	71	82	94	105	
20	198	220	238	75	86	98	111	
25	205	226	243	78	88	100	116	
30								

Oculus Tauri.

Alramech.

From euening to midnight.

For the nyght.

February hath. xxviii. dayes.

108	124	146	172	201	225			1
111	129	153	180	207	231			5
117	136	162	190	216	237			10
122	144	169	198	223	243			15
128	152	178	206	230	248			20
134	159	188	214	236	252			25
								30
1	2	3	4	5	6			

From midnight vnto day.

Alramech.

For the day.

		12	11	10	9	8	7	H	
8	Staffe	23:	25	30	42	80·	6896		shad.
	Squire	6	6.	5.	3:	2.	0		shad.
	H	0	1	2	3	4	5		

		12	11	10	9	8	7	H	
18	Staffe	20:	21:	25:	34:	61:	226		shad.
	Squire	7	7.	6.	4	2	1.		shad.
	H	0	1	2	3	4	5		

		12	11	10	9	8	7	H	
28	Staffe	17:	18:	22.	29.	45	112		shad.
	Squire	8	8.	6:	5	3	1		shad.
	H	0	1	2	3	4	5		

0 10 20 gr. X

	7	8	9	10	11	12	
1	59	70	81	93	105	120	
5	62	74	84	95	108	125	
10	65	75	87	99	113	131	
15	69	80	91	103	118	138	
20	72	83	94	107	123	146	
25	75	86	98	112	129	153	
30	80	90	102	117	136	161	

From euening to midnight.

Marche hath. xxxi. dayes.

Alramech.

1	142	168	196	222	241		
5	147	173	201	227	245		
10	155	183	210	232	250		
15	163	192	218	238	255		
20	171	200	225	243	259		
25	180	208	232	249	262		
30	191	216	237	254	267		

From midnight vnto day.

For the nyght.

	1	2	3	4	5	6

For the day.

		12	11	10	9	8	7	H	
11	Staffe	15	16	19	24:	37:	74.		shad.
	Squire	9:	9	8.	6	4	2		shad.
	H	0	1	2	3	4	5		0

		12	11	10	9	8	7	6	H	
21	Staffe	13	14	16	21	30:	54:	221:		shad.
	Squire	11	10:	9.	7.	5.	2:	1.		shad.
	H	0	1	2	3	4	5	6		10 gr. V

		12	11	10	9	8	7	6	H	
31	Staffe	11:	12	14:	18:	26	43:	112.		shad.
	Squire	12:	12.	10	8.	5:	3:	1:		shad.
	H	0	1	2	3	4	5	6		20

Alramech.

For the nyght.

Alramech.

	8	9	10	11	12				
1	92	104	118	138	164				
5	94	107	123.	145	171				
10	98	111	129	153	180				
15	101	117	135	160	189				
20	106	122	144	168	198				
25	111	128	152	178	207				
30	117	135	159	189	215				

From midnight vnto dyse.

Aprile hath. xxx. dayes.

From euening to midnight.

193	218	239	255					1
199	225	244	258					5
207	231	248	262					10
215	236	253	266					15
223	243	257	270					20
230	248	262	274					25
236	252	266	278					30

1 2 3 4 5

For the nyght.

		12	11	10	9	8	7	6	H	
10	Staffe	10	11.	13.	16:	23	36	76	shad.	
	Squire	14	13:	11	9.	6	4	2	shad.	0
H		0	1	2	3	4	5	6		
21	Staffe	9	9:	11:	15	21.	31:	58:	267:	shad.
	Squire	16	15	12:	9:	7	4:	2:	1.	shad.
H		0	1	2	3	4	5	6		
31	Staffe	8	8:	10:	14.	19	28	49.	139:	shad.
	Squire	18	17.	14.	10:	7:	5	3	1	shad.
H		0	1	2	3	4	5	6	7	

10 | 20 | 1 | Lr M

	8	9	10	11	12		
1	117	136	160	190	216		
5	120	142	168	195	222		
10	128	152	178	205	230		
15	134	159	188	214	235		
20	143	168	196	222	241		
25	151	177	205	230	248		
30	160	189	215	236	253		

May hath. xxxi. dayes.

237	253	267	278				1
241	256	269	280				5
247	261	273	285				10
252	266	278	288				15
257	270	281	292				20
262	274	285	296				25
266	278	288	300				30
1	2	3	4	5			

From cueuing to midnight.

From midnight vnto day.

For the nyght.

Alrámech.

		12	11	10	9	8	7	6	5	H	
12	Staffe	7	8	10.	13.	17:	26.	43.	100	shad.	0
	Squire	20.	18	15.	11	8	5:	3	1:	shad.	
	H	0	1	2	3	4	5	6	7		

		12	11	10	9	8	7	6	5	4	H	
22	Staffe	7.	7:	9	12	17.	24	39	82:	2580	shad.	10
	Squire	21	19:	15:	12.	8:	6	4.	2.		shad.	
	H	0	1	2	3	4	5	6	7	8		

		12	11	10	9	8	7	6	7	H	
32	Staffe	6:	7	9	12	16:	23:	37	74:	565	shad.	20
	Squire	22	20	16	12	9	6	4	2		shad.	
	H	0	1	2	3	4	5	6	7			

For the day.

gr. II

	8	9	10	11	12				
1	161	191	216	237	254				
5	169	197	223	242	257				
10	180	207	231	249	262				
15	191	216	237	254	267				
20	199	224	243	258	271				
25	207	231	249	262	275				
30	216	237	254	267	279				

Alramech.

From euening to midnight.

Iune hath. xxx. dayes.

1	267	279	290	301					
5	270	282	292	303					
10	274	285	297	308					
15	279	290	301						
20	283	293	304						
25	286	297	308						
30	290	301	82						
	1	2	3	4	5				

From midnight vnto daye.

For the nyght.

Alramech.

For the day.

		12	11	10	9	8	7	6	5	4	H	
1	Staffe	6:	7	9	12	16:	23:	37	74:	565	shad.	20 gr. II
	Squire	22	20	16	12	9	6	4	2		shad.	
	H	0	1	2	3	4	5	6	7	8		

		12	11	10	9	8	7	6	5	4	H	
12	Staffe	6:	7	9.	12.	16	23	36:	72	453	shad.	0
	Squire	22:	20:	16	12	9	6	4	2	0	shad.	
	H	0	1	2	3	4	5	6	7	8		

		12	11	10	9	8	7	6	5	4	H	
23	Staffe	6:	7	9	12	16	23:	37	74:	565	shad.	10
	Squire	22	20	16	12	9	6	4	2		shad.	
	H	0	1	2	3	4	5	6	7	8		

gr 65

	8	9	10	11	12			
1	219	239	255	268	280			
5	225	244	259	272	283			
10	233	250	264	275	286			
15	238	254	267	279	290			
20	243	258	271	283	293			
25	249	262	275	286	297			
30	254	267	279	290	300			

Iuly hath.xxxi.dayes.

290	302	83					1
293	304	86					5
297	79	90					10
301	82	93					15
304	86	98					20
308	89	101					25
82	93	106					30
1	2	3	4	5			

From euening to midnight.

From midnight vnto day.

For the nyght.

Alramech.

Alramech.

Oculus Tauri.

		12	11	10	9	8	7	6	5	4	H	
3	Staffe	7.	7:	9	12	16:	24	39	82:	2580	ſhad.	20 gr ♋
	Squire	21	19:	15:	12.	8:	6	4	2.		ſhad.	
	H	0	1	2	3	4	5	6	7	8		

		12	11	10	9	8	7	6	5	H	
14	Staffe	7	8	10.	13.	17:	26.	43.	100	ſhad.	0
	Squire	20.	18	15.	11	8	5:	3	1:	ſhad.	
	H	0	1	2	3	4	5	6	7		

		12	11	10	9	8	7	6	5	H	
24	Staffe	8	8:	10:	14.	19	28	49.	139:	ſhad.	10
	Squire	18	17.	14.	10.	7:	5	3	1	ſhad.	
	H	0	1	2	3	4	5	6	7		

For the day.

gr. ♌

B d.

	8	9	10	11	12				
1	255	267	279	291	302				
5	259	272	284	294	304				
10	263	275	286	297	79				
15	267	279	290	300	81				
20	270	282	292	303	86				
25	274	285	296	308	88				
30	278	288	299	81	92				

Alrænech.

Oculus Tauri.

From euening to midnight.

For the nyght.

August hath.xxxi.dayes.

82	94	107	122	141					1
86	98	111	126	146					5
89	102	116	132	154					10
93	105	119	138	160					15
96	110	125	144	167					20
100	114	130	152	174					25
104	118	136	158	183					30
1	2	3	4	5					

From midnight vnto daye.

Oculus Tauri.

For the day.

		12	11	10	9	8	7	6	5	H	
3	Staffe	9	9:	11:	15	21.	31:	58:	267:	shad.	20 gr. ♌
	Squire	16	15	12:	9:	7	4:	2:	0:	shad.	
	H	0	1	2	3	4	5	6	7		

		12	11	10	9	8	7	6	H	
14	Staffe	10	11	13.	16:	23	36	76	shad.	0
	Squire	14	13:	11.	9.	6	4	2	shad.	
	H	0	1	2	3	4	5	6		

		12	11	10	9	8	7	6	H	
24	Staffe	11:	12	14:	18:	26:	43:	111:	shad.	10
	Squire	12.	12	10	8.	5:	3:	1:	shad.	
	H	0	1	2	3	4	5	6		

gr ♍

	7	8	9	10	11	12		
1	267	279	290	301	82	93		
5	270	281	292	303	85	96		
10	273	285	296	307	88	100		Alramech.
15	276	287	298	80	91	104		
20	280	291	302	83	94	108		Oculus Tauri.
25	284	295	305	87	99	112		
30	287	297	80	91	103	117		

From euen ng to midnight.

September hath.xxx.dayes.

106	120	139	161	186			1
109	124	144	166	192			5
113	129	150	173	199			10
117	135	155	180	204			15
123	142	162	189	212			20 Oculus Tauri.
128	149	171	196	219			25
134	155	180	204	225			30
1	2	3	4	5	6		

From midnight vnto day.

For the nyght.

		12	11	10	9	8	7	6		H	
3	Staffe	13	14	16:	21	30:	54:	221:		shad.	20 gr ♍
	Squire	11	10:	9.	7.	5.	3:	0:		shad.	
	H	0	1	2	3	4	5	6			

		12	11	10	9	8	7			H	
14	Staffe	15	16	19.	24:	37.	73:			shad.	0 gr. ♎
	Squire	9:	9	8	6	4	2			shad.	
	H	0	1	2	3	4	5				

		12	11	10	9	8	7			H	
24	Staffe	17:	18:	22.	29.	45:	112			shad.	10
	Squire	8	8.	6:	5	3	1:			shad.	
	H	0	1	2	3	4	5				

For the day.

		6	7	8	9	10	11	12	
	1	277	288	298	80	92	104	117	
	5	279	290	302	82	94	107	122	
Alramech.	10	284	294	305	86	98	111	127	
Oculus Tauri.	15	286	68	79	90	102	116	133	
	20	290	71	82	93	106	121	140	
	25	294	75	86	98	111	126	146	
	30	297	79	90	102	116	132	154	

From euening to midnight.

For the nyght.

October hath. xxxi. dayes.

	135	157	181	205	226	243		1
	141	162	188	210	231	247		5
	147	170	195	218	237	252		10
	154	178	202	225	242	256		15
Oculus Tauri.	162	186	210	230	246	260		20
	169	194	217	235	251	264		25
	177	202	224	241	255	268		30
	1	2	3	4	5	6		

From midnight vnto daye.

For the day.

		12	11	10	9	8	7	H	
4	Staffe	20	21:	25:	34:	61:	226:		shad.
	Squire	7	7.	6.	4	2:	0:		shad.
	H	0	1	2	3	4	5		

20 gr. ♎

		12	11	10	9	8	7	H	
14	Staffe	23:	25	30	42	79:	6896		shad.
	Squire	6	6.	5.	3:	2.			shad.
	H	0	1	2	3	4	5		

0

		12	11	10	9	8	H	
24	Staffe	27:	29	35:	52	119		shad.
	Squire	5	5.	4	3:	1		shad.
	H	0	1	2	3	4		

10

gr ♏

	5	6	7	8	9	10	11	12	
1	287	298	80	92	104	117	135	156	
5	290	302	82	94	107	122	140	163	
10	294	305	87	98	111	127	147	171	Alræmech.
15	298	80	91	103	117	135	156	180	
20	303	83	95	108	123	142	165	189	Oculus Tauri.
25	307	88	100	113	129	150	173	198	
30	81	92	104	119	136	158	183	206	

From euening to midnight.

Nouember hath. xxx. dayes.

182	205	226	243	257	270	281	292	1	
188	211	231	248	261	273	285	296	5	
196	218	237	252	265	277	288	000	10	
204	225	243	257	269	281	292	000	15	Oculus Tauri.
213	232	248	261	274	285	297	000	20	
220	238	253	266	278	290	127	000	25	
227	244	258	270	282	293	135	000	30	
1	2	3	4	5	6	7	8		

From midnight vnto day.

For the nyght.

		12	11	10	9	8	H		
2	Staffe	32.	34	42	65:	209		ſhad.	20 gr. ♏
	Squire	4:	4	3:	2	1.		ſhad.	
	H	0	1	2	3	4			

		12	11	10	9	8	H		
13	Staffe	36	39	49:	83	550		ſhad.	0
	Squire	4	4:	3	2.	0:		ſhad.	
	H	0	1	2	3	4			

		12	11	10	9	H			
22	Staffe	40:	45:	57	104.			ſhad.	10 gr ♐
	Squire	3:	3	2:	1:			ſhad.	
	H	0	1	2	3				

For the day.

Oculus Tauri.

For the night.

Oculus Tauri.

Alramech.

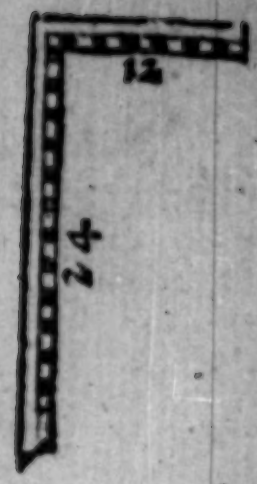
	5	6	7	8	9	10	11	12	
1	81	92	105	119	136	158	183	207	From coming to midnight.
5	84	96	109	124	144	166	192	214	
10	89	101	115	132	153	175	201	222	
15	93	105	120	139	161	186	209	230	
20	98	111	127	147	169	195	217	236	
25	102	116	133	154	177	202	224	242	
30	107	122	141	163	188	211	231	248	

December hath. xxxi. dayes.

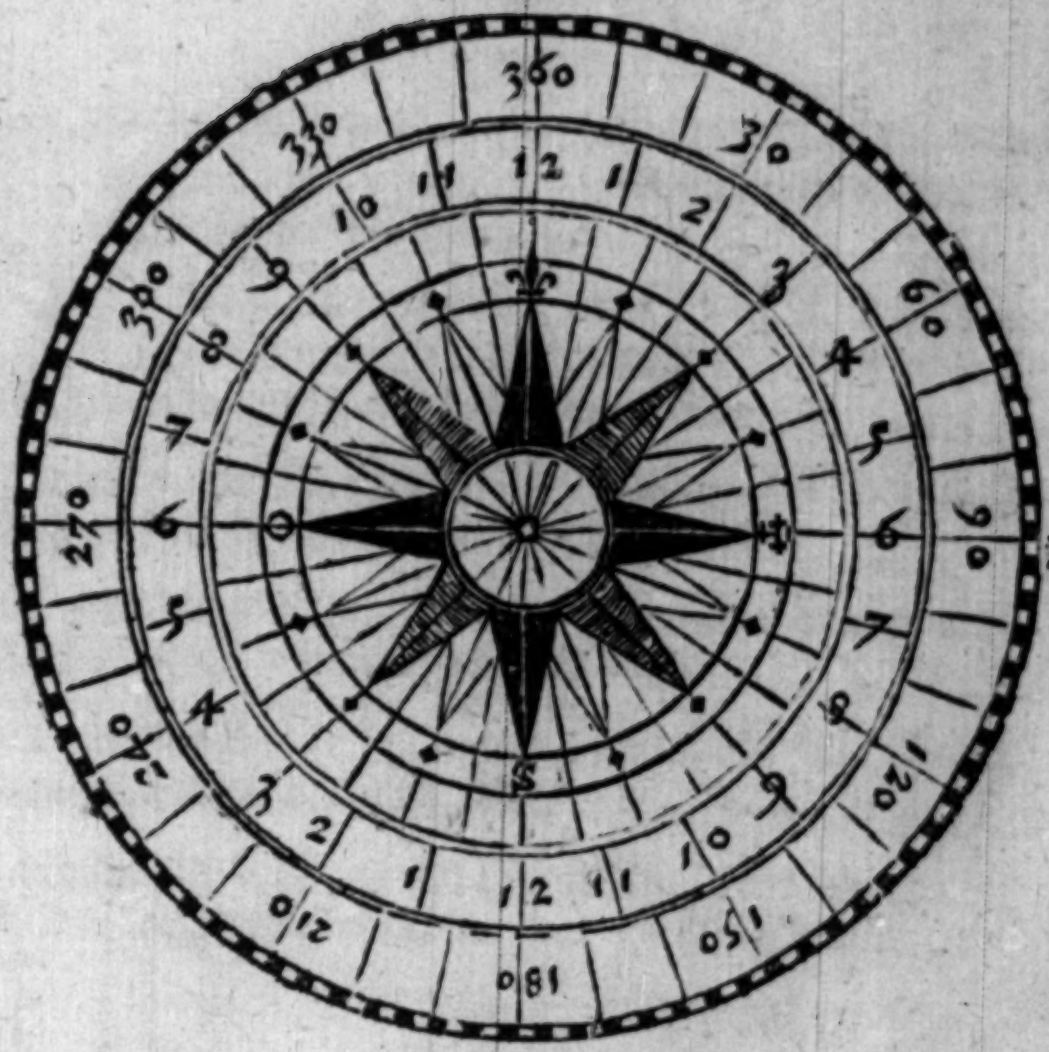
1	228	244	258	271	283	293	135	
5	234	249	263	275	286	122	144	
10	240	255	267	279	291	129	153	
15	246	260	272	284	295	138	163	
20	251	264	276	287	124	147	174	
25	256	268	280	291	132	155	184	
30	261	273	285	296	140	165	194	From midnight vnto day.
	1	2	3	4	5	6	7	

For the day.

		12	11	10	9	H				
2	Staffe	43:	47	62:	122:				shad.	20 gr. ♐
	Squire	3:	3	2	1				shad.	
12	Staffe	45	49.	65.	132:				shad.	0
	Squire	3	3	2	1				shad.	
22	Staffe	43:	47:	62:	122:				shad.	10
	Squire	3:	3	2:	1				shad.	
31	Staffe	40:	45:	57	104	0			shad.	20
	Squire	3:	3	2:	1:				shad.	
		H	0	1	2	3				gr. ♑



North.



West. East.

South.

Thus is endid the Peculiar Kalendar, very commodious for the day and nyght houre. I haue here adioyned the Instrument without the Square, whiche may sufficie for the whole use of the tofore sayde Kalendar, with the healpe of the Squire and Staffe.

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I May not here omitte a *Kalendar Generall* diuided in two partes, wherof the first conteyneth six Monethes, from *Ianuarie* to *Iune*: The seconde other six Monethes from *July* to *December*. In this *Kalendar* are set forth the Festiual daies, the entryng of the Sunne in the Signes *celestiall*, the euil dayes noted with one Pricke. For a further declaration of those euill dayes, reade this folowyng.

The yeare hath. xxxiii. euyll dayes general for euer.

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IANVARIE hath eyght suche daies, the.j. the.ij. the iiij. the.v. the. r. the. rv. the. rvj. the. rrir. Drinke whyte wyne this Moneth.

Februarie hath thre dayes, the. viij. the. r. the. rvj. these not so euil, the rrvj. the. rrvj. the. rrviij. Eate no potage of okes or malowes: They are venemous.

Marche thre daies, the. rv. the. rvj. the. rir: this not so euill, the rrviij. daie. This Moneth, all swete meates are good.

April two dayes. the. rvj. the. rrj: these not so euil, the. vj. the. viij the. r. the. rr. Use hote meates, of lyght digestion.

Maie thre dayes, the. vj. the. rv. the. rr: these not so euill, the. ij. the. vi. Ryse early, and vse breakefast.

Iune two, the. iiij. the. vj: these not so euill, the. r. the. rv. the. rrij Sage & lettuse are good to eate. Colde water fasting hurteth not

Iulie two daies, the. rv. the. rr.. Abstayne from carnalitie.

August two daies, the. rir. the. rr: these not so euill, the first, the rrir the. rrr. It hurteth not to abstayne from potage, and all boote meates, and drinkes of spicerie.

September two daies, the. vj. the. vj. these not so euill, the. ij. the iij. the. rrj. the. rrij. Eate good fruyte.

October one daie, the. vj: these not so euil, the. iij. the. rvj. the. rriiij. Good wyne is wholsome this Moneth.

Nouember two daies, the. rv. the. rir: these not so euil, the. v. the. vi. the. rrviij. the. rrir. Blede not.

December thre daies, the. vj. the. vj. the. ir. these daies not so euil, the. rv. the. rvj. the. rrj. Blede not ouer muche. Warme not thy legges at the fyre.

Now ensueth the General Calender. C. i.

The first part of the generall Kalendar: from Ianuarie to Iune.

Ianuarie.	Februarie.	March.	Daies	April.	May.	Iune.
:A Circlic.	d	d	1	g	b Phi. Iac.	e
:b	e Purifi.	e	2	A	c	f
c	f	f	3	b	.d	g
:d	g	g	4	c	e	:A
:e	A	A	5	d	f	b
f Epiph.	b	b	6	e	.g	c
g	c	c	7	.f	:A	:d
A	:d	d	8	.g	b	e
b	e ☉ in ♓	e	9	A	c	f
:c	:f	f	10	.b	d	.g
d ☉ in ♒	g	g ☉ in ♈	11	c ☉ in ♉	e	A Barna.
e	A	A Spring.	12	d	f ☉ in ♊	b ☉ in ♋
f Hilar.	b	b	13	e	g	c Sumer.
g	c Valent.	c	14	f	A	d
:A	d	:d	15	g	:b	.e
b	e	:e	16	:A	c	f
:c	:f	f	17	b	d	g
d	g	g	18	c	e	A
e	A	:A	19	d	f	b
f	b	b	20	.e	:g	c
g	c	c	21	:f	A	d
A	d	d	22	g	b	.e
b	e	e	23	A Georg.	c	f
c	f Mat.	f	24	b	d	g Iothap.
d Cō. Pau.	g	g Anun.	25	c Marc.	e	A
e	A	A	26	d	f	b
f	.b	b	27	e	g	c
g	.c	.c	28	f	A	d
:A		d	29	g	b	e Pe. Pa.
b		e	30	A	c	f
c		f	31		d	

The seconde part of the Generall Kalendar: from Iulie to December.

Iuly.	August.	Septemb.	Dayes	October.	Nouem.	Decem.
g	.c Pet. Vin.	f	1	A	d Om. sã.	f
A	d	g	2	b	e Om. an.	g
b	e	.A	3	.c	f	A
c	f	.b	4	d	g	b
d	g	c	5	e	.A	c
e Dog beg.	A	:d	6	:f	.b	:d Nico.
f	b	:e	7	g	c	:e
g	c	f Nat. Ma.	8	A	d	f Cõ. ma.
A	d	g	9	b	e	:g
b	e	A	10	c	f	A
c	f	b	11	d	g	b
d	g	c	12	e	A	c ☉ in ♑
e	A	d	13	f	b ☉ in ♐	d wynter.
f ☉ in ♌	b ☉ in ♍	c ☉ in ♎	14	g ☉ in ♏	c	e
:g	c	f Heruest.	15	A	:d	.f
A	a	g	16	.b	e	g
b	e Dog end	A	17	c	f	.A
c	f	b	18	d Luc.	g	b
d	:g	c	19	e	:A	c
:e	:A	d	20	f	b	d
f	b	.e Mathe.	21	g	c	e Tho. ap.
g Ma. mag.	c	.f	22	A	d	f
A	d	g	23	b	e	g
b	e Bartho.	A	24	.c	f	A
c Iac. Apo.	f	b	25	d	g	b N. st. do.
d	g	c	26	e	A	c Steph.
e	A	d	27	f	b	d Io. euã.
f	b	e	28	g Si. Iud.	.c	e Innocẽ.
g	.c decol. Io.	f Micha.	29	A	.d	f Tho.
A	.d	g	30	b	c Andr.	g
b	e		31	c		A

To the brief use of this Generall Kalendar.

IN the Columpne where your *Moneth* is noted in the hedde, ye shall there fynde runnyng downe the Columpne the *Festiuall* dayes of that Moneth, the entre of the *Sunne* in the *Coelestial Signes*, the *Euil daies* pricked &c.

I woulde haue placed in this *Kalendar* the *Fayers*, *Termes* also, but that can not remayne continuall true: For those that ensue mouable Feastes are mouabe, and therfore may haue no certayne place. For the *Termes*, note thees preceptes folowyng. The *Fayers*, shalbe declared by two *Tables* immediatly ensuyng this *Kalendar general*.

How to knowe the Termes.

KNowe that *Easter Terme* alwayes beginneth the 18 daye after *Easter*, rekening *Easter daye* for one: and endeth the *Mondaye* next after the *Ascension daye*.

Trinitie Terme beginneth the *Friday* next after *Corpus Christi daye*: and endeth the *Wednesdaye* fourtennight after.

Michaelmasse Terme beginneth the 9 or 10 daye of *October*: and endeth the 28 or 29 of *Nouember*.

Hilarie Terme beginneth the 23 or 24 daie of *Ianuarie*: and endeth the 12 or 13 daye of *Februarie*.

A Table Contaynyng the Moneth Daye and Place, of the principal Fayers of Englande: to be augmented at pleasure in order folowyng.

Januarij.	The fyrst daye of *Januarij*, the fayer is at Bristowe, and also at Salisburie.
Februarij.	The 2 daye at Bathe. at Maydstone. The 14 at Feuersame. *Ashwednesdaie*, at Lychfelde. at Royston. at Tamworth. The first mondaye in *Lent*, at Ciseter. at Abington. The 24 at Henly vpon Temmes. at Teukesbury.
Marche.	The 4 *Sonday in Lent*, at Stanforde. at Sudberie. The 5 *Sondaie*, at Grantam. at Salisburie the *Monday before our Lady daie*. at Wylbych *Palme euē*. The 13 at Wye. The 25 at Northamptō. at Great Charte at Waulden.
Aprile.	The 5 day at Walyngforde. The 7 at Darbie. The 9 at Byckelworth. at Byllingworth. at Easam the *Munday* after. The 3 *Sondaye* after *Easter* at Louth. The 23 at Charyng. at Ipswyche. at Amtyll. at Hinigam. at Gysforde. The 25 at Darbe. the 26 at Tenterden.
Maye.	The 1 day at Stow the olde. at Readyng. at Maydstone. at Leceter. at Chensforde. The 8 day at Beuerlie, *Ascencion daye*, at Byrmyngcham. at S. Edes. at Byshops Statforde. *Whytsondaye*, at Kyngstone vpon Temmes. *Trinitie Sundaye*, at Rouel. at Crābroke the 19 daye. The 27 daye at Lenham.
Iune.	*Corpus Christi*, at Couentrie, S. Edes. at Byshop Stanforth. at Rosse. The 9 at Maydstone. The 11 at Okyngam. The 23 Shrowsburie. at S. Albons. The 24 at Cambrydge. at Glocestre. at Lyncolne. at Wynsor. at Colchester. The 29 at Woller. at Hāpton. at Peterborow. The 17 at Folkstone. The 24 at Hartsame. The 28 at Hetcorne.

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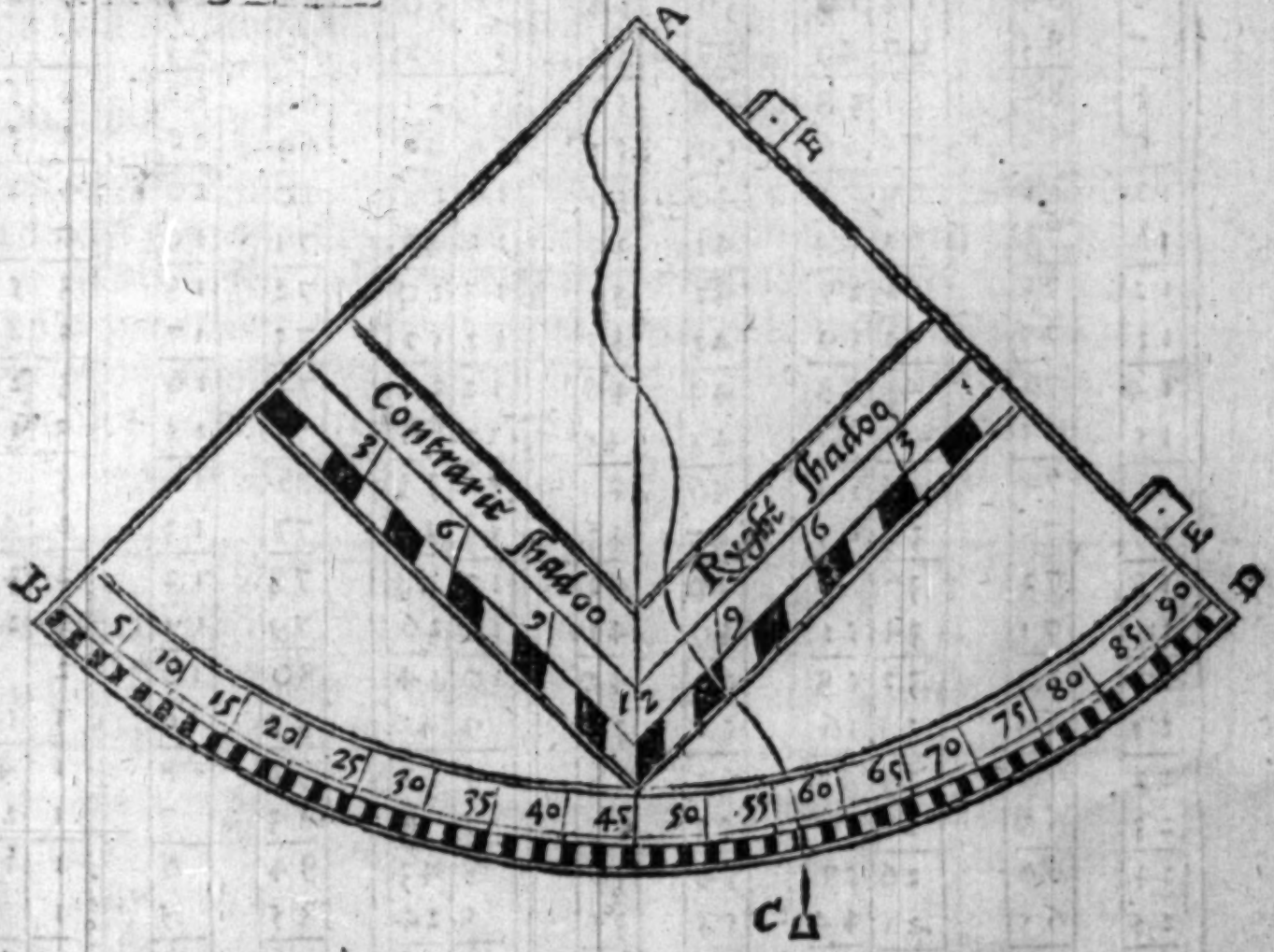
A Table contayning the Moneth, Day, and Place, of the principall Fayers of Englande: to be augmented at pleasure in order folowyng.

July.	The 11 day Horse fayer at Partney. at Nabor. at Felix. The 12 day at Lyd. The 15 at Pynchbake. The 17 at Wynchecome. The 20 at Uxsbrydge. at Cattesby. The 22 at Marborowe. at Wynchester. at Colchester. at Tetberie. The 25 at Brystowe. at Douer. at Chylham. at Ipswyche. at Northhampton. at Darby. at S. James by London. at Readyng. at Lowth at Maelsbery.
August.	The 1 day at Feuersame. at Dōstable. at S. Edes. at Budforth at Marram Churche. at Wysbyche. The 9 at Rumney. The 10 at Bedforde. at Fernam. at Strodes. at Blakamore. S. Lau. at Maulton. The 24 at London. at Tewxsbery. at Sudberrie. at Norwyche. at Northalertō. at Douer. at Rye. The 28 at Ashforde.
Septembre.	The 8 day at Cambridge. at Storbridge. at London in Southworke. at Smyde. at Recoluer. at Partny thre Lady daies. The 14 at Waltam Abbie. at Wotton vnder Hedge. at Smaldyng. The 21 at Croyden. at Hulden in Hulennesse. at S. Edmons berie. at Maulton. at S. Yues. at Haldy Lanam. at Wyltemal. at Sittingborowe. at Douer. at Estrie. The 29 day at Canterburie.
October.	The 6 day at S. Sythes besyde Norwyche. The 13 at Grauesende. at Wynsor. at Marchefelde. The 18 at Ely. at Staneton. at Charyng. The 28 at Harforde. at Cisiter at Newmarket.
Nouember.	The 2 day at Kyngstone. at Blechyngly. The 6 at Neuporte ponde. at Standly. The 11 at Douer. The 13 at S. Edmōdes bery. The 20 at Hyth. The 23 at Sandwyche. The 30 at Rochester. at Maydenhead.
Decēb.	The 29 at Canterberie. The 5 at Plucklis. The 6 at Spalding. The 7 at Sanderst.

BEcause I vnderstãde many are desierous how to get exatly the iust length of *Staffe* and *Squier* shadowe before treated of, vpon on leauell groundes, or other wayes whersoeuer it be, yea without eather *Squier* or *Staffe*, I haue calculated a *Table* folowing thorowly satisfying thẽ, so that they get the heyght of the *Sunne* any waye, or as I shall now enstruct.

Behold this *Instrument* called a *Quadrant* the iust fourth part of a *Circle*, euen suche a *Circle* as I taught you before to make for the nyght *Dyal*: cõtayning the fourth part of his diuisions, that is 90 degrees, only two syghtes and a plume lyne added, to be placed at the begynning of this boke as ye may there: and here see. I haue here also put the *Scale* to the *Quadrant*, whiche serueth wel for shadowes, and as wel for heyghtes. The vse of this *Scale* is declared in my booke titled *Tectonicon*.



How by this Instrument to get the heyght of the Sunne at all tymes.

LYfte vp hansomly your *Quadrant* the *Sunne beames* persyng the Syghtes. The *Plommet* and *Lyne* then at libertie falling, noteth there the degrees of heyght at that present, with the which ye shall entre this *Table* immediatly folowing, to get then, and in lyke maner at al other tymes: the iust shadowe of the *Staffe* or *Squier*.

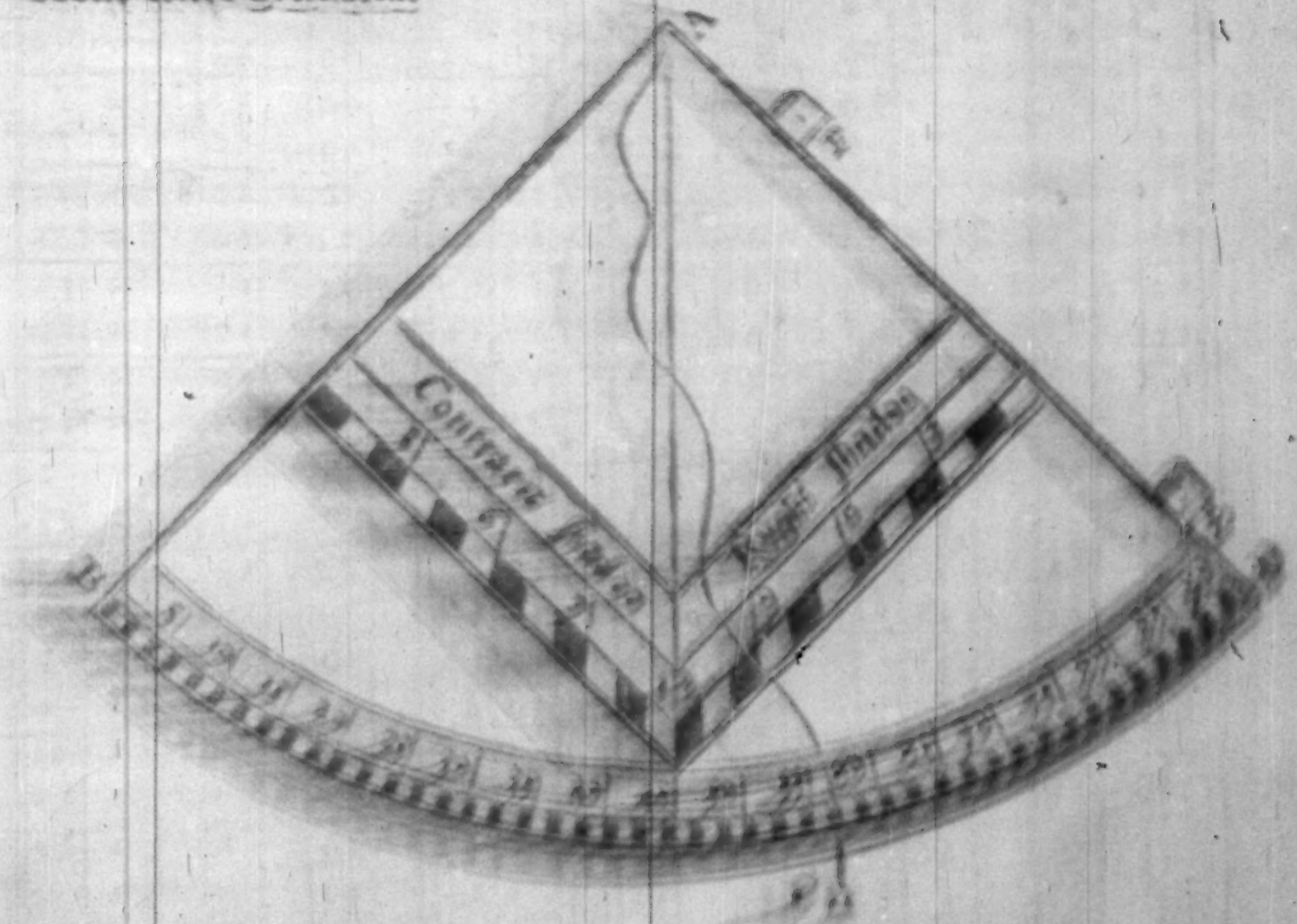
A table

A Table containing the Month, Day, and Place of the principall Fayers of England, to be augmented at pleasure in order following.

Ayrly.	The [illegible] day Dolle fayer at Partney, at Nabor, at Felie. The [illegible] day at Lod. The [illegible] at Pynchbake. The [illegible] at Wynchecome. The [illegible] at Uttlebridge, at Cattesby. The [illegible] at Marbordwe, at Wynchester, at Colchester, at Tetherie. The [illegible] at Bryskowe, at Dover, at Chrisham, at Ipswyche, at Northhampton, at Darby, at S. James by London, at Readyng, at Lowth at Paelsbery.
Maydyng.	The [illegible] day at Fourclamer, at Dunstable, at S. Edes, at Budforth at Greenan Cauerbe, at Wyshyche. The 9 at Rumney. The 10 at Bedfarde, at Fermun, at Strobes, at Blakamore, S. Lau, at Wantlow. The [illegible] at London, at Trowsbery, at Sudberrie, at Sutwythe, at Northaberth, at Dover, at Rye. The 28 at Ashforde.
Sterbridge.	The [illegible] day at Canterbridge, at Sterbridge, at London in Southwarke, at Smyde, at Reoslaer, at Partny thre Lady daies. The 14 at [illegible] Abbie, at Wotton under Hedge, at Smaldyng. The [illegible] at London, at Hulbrie in Hulennesse, at S. Edmons berie, at [illegible] at S. Ouse, at Holdy Lanam, at Wyltemal, at Sittingbourne, at [illegible] at Ellie. The 29 day at Canterburie.
Grauesbery.	The [illegible] day at S. Sythes besede Norwyche. The 13 at Grauesbery, at [illegible] at Bacchefelde. The 15 at Ely, at Staneton, at [illegible] at Cillter at Newmarket.
Neuporte.	The [illegible] day at Kyngstone, at Blechyngly. The 6 at Neuporte [illegible] at Dover. The [illegible] at S. Edmondes bery. [illegible] at Dunwyche. The [illegible] at Rochester, at [illegible]
Spalding.	The [illegible] at Canterbury. The [illegible] at Pinchlis. The [illegible] at Spalding. [illegible] at Sandford.

BEcause I vnderstãde many are desirous how to get exactly the iust length of staffe and Squier shadowe before treated of, vpon on leavell groundes, or other wayes whersoeuer it be, yea without rather Squier or staffe, I haue calculated a Table folowing therowly satisfying the, so that they get the heyght of the Sunne any waye, or as I shall now enstruct.

Behold this instrument called a Quadrant the iust fourth part of a Circle, euen suche a Circle as I taught you before to make for the nyght Dyal: cõtayning the fourth part of his diuisions, that is 90 degrees, only two syghtes and a plumme lyne added, to be placed at the beginning of this boke as ye may there and here see. I haue here also put the Scale to the Quadrant, whiche serueth wel for shadowes, and as wel for heyghtes. The vse of this Scale is declared in my booke titled Technicon.



How by this instrument to get the heyght of the Sunne at all times.

I

A Table generall of Shadowes, Ryght and Contrary: for euery grade of the Sunnes heyght: The thyng causing Shadowe supposed 12 partes.

Heyght of the Sunne.		Staffe. Shadow.		Heyght of the Sunne.		Staffe. Shadow.		Heyght of the Sunne.		Staffe. Shadow.	
G	G	P	M	G	G	P	M	G	G	P	M
0	90	Sha.	m.	30	60	20	47	60	30	6	56
1	89	687	34	31	59	19	58	61	29	6	39
2	88	343	43	32	58	19	12	62	28	6	23
3	87	228	59	33	57	18	29	63	27	6	7
4	86	171	37	34	56	17	47	64	26	5	51
5	85	137	10	35	55	17	8	65	25	5	36
6	84	114	10	36	54	16	30	66	24	5	21
7	83	97	49	37	53	15	52	67	23	5	6
8	82	85	28	38	52	15	21	68	22	4	51
9	81	75	46	39	51	14	49	69	21	4	36
10	80	68	3	40	50	14	18	70	20	4	22
11	79	61	44	41	49	13	48	71	19	4	8
12	78	56	27	42	48	13	20	72	18	3	54
13	77	51	59	43	47	12	52	73	17	3	40
14	76	48	8	44	46	12	26	74	16	3	26
15	75	44	47	45	45	12	0	75	15	3	13
16	74	41	51	46	44	11	35	76	14	3	0
17	73	39	15	47	43	11	11	77	13	2	46
18	72	36	4	48	42	10	48	78	12	2	32
19	71	34	51	49	41	10	26	79	11	2	20
20	70	32	58	50	40	10	4	80	10	2	7
21	69	31	16	51	39	9	43	81	9	1	54
22	68	29	42	52	38	9	22	82	8	1	41
23	67	28	16	53	37	9	3	83	7	1	28
24	66	26	57	54	36	8	43	84	6	1	16
25	65	25	44	55	35	8	24	85	5	1	3
26	64	24	37	56	34	8	6	86	4	0	50
27	63	23	33	57	33	7	48	87	3	0	38
28	62	22	34	58	32	7	30	88	2	0	25
29	61	21	40	59	31	7	13	89	1	0	12
30	60	20	47	60	30	6	56	90	0	0	0

Heyght of the Sunne.	Squier. Shadow.	Heyght of the Sunne.	Squier. Shadow.	Heyght of the Sunne.	Squier. Shadow.

The use of this Table, and first for Staffe Shadowe.

Ensample.

I Suppose the heyght of the Sunne taken by the Quadrant 34 degrees, nowe I requyre the exacte lengthe of Staffe and Squier Shadowe. For ryght shadowe, first seke out the degrees in the left part of the Table, and vnder this tytle the heyght of the Sunne: if they be not in that lefte rowe downewardes, resorte to the nexte rowe and lyke tytle, vntyll ye fynde the degrees: then in ryght order toward the right hande, in the nexte, Columpne vnder the title of Staffe Shadow, are 17 partes and 47 minutes, your desyre.

For Squyer shadowe, tytled contrary Shadow.

SEke your degrees in the ryght parte vpwarde at this title *Heyght of the Sunne*, in the botome of this Table: then shal ye finde on the right hand of 34 degrees, in the next Columpne, 8 *partes* and 6 *Minutes*: that is the very length of Squier Shadowe when the Sunne is 34 degrees in heyght.

OCcasioned I cannot here omitte an other Table faythfully supputated for the Sunnes *altitude*, by the whiche with quicke speade the houre is knowen. This Table conduceth manyfolde wayes, yea to the Compostion of diuers and many Instrumentes: as *Quadrantes*, *Nauicles*, *Cylindres*, *Rynges*. &c.

Beholde nowe it doth ensue, and also the briefe vse of it.

BRITISH MUSEUM

A Table of the Sunnes altitude, for euery houre: the Pole mounted. 51. Degrees 30. Minutes, exactely calculated.

Houres before n.				12		11		10		9		8		7		6		5		4	
Houres after n.						1		2		3		4		5		6		7		8	
S:	G	S	G	G	M	G	M	G	M	G	M	G	M	G	M	G	M	G	M	G	M
	30	♋	0	62	0	59	43:	53	45	45	42	36	42:	27	23:	18	11	9	28:	1	31.
	25		5	61	54:																
	20		10	61	37:	59	21.	53	26:	45	24.	36	25	27	6	17	54.	9	9.	1	13:
	15		15	61	9:																
	10		20	60	30:	58	17.	52	28.	44	32	35	35	26	16.	17	3	8	16.	0	16:
	5		25	59	41:																
♊	0	♌	0	58	42:	56	34.	50	55:	43	6.	34	13.	24	56:	15	41:	6	50.	0	0
	25		5	57	34.																
	20		10	56	17:	54	15	49	48:	41	10:	32	22.	23	6.	13	50	4	55:	0	0
	15		15	54	52:																
	10		20	53	21:	51	26:	46	12:	38	46:	30	6.	20	52.	11	34.	2	34.	0	
	5		25	51	43:																
♉	0	♍	0	50	0	48	11	43	11.	35	58	27	27.	18	18:	8	59:	0	0		
	25		5	48	12:																
	20		10	46	20:	44	37.	39	51	32	53:	24	32.	15	27.	6	8:	0	0		
	15		15	44	25:																
	10		20	42	28:	40	51:	36	18	29	34:	21	24:	12	25:	3	6.	0			
	5		25	40	29:																
♈	0	♎	0	38	30	36	58	32	37.	26	7:	18	8.	9	16.	0	0				
	25		5	36	30:																
	20		10	34	32.	33	4	28	55:	22	38:	14	51:	6	7	0	0				
	15		15	32	35.																
	10		20	30	40.	29	16.	25	18	19	14:	11	38	3	2:	0					
	5		25	28	48.																
♓	0	♏	0	27	0	25	40	21	51:	15	59:	8	34.	0	6.						
	25		5	25	17.																
	20		10	23	39.	22	22.	18	42:	13	1:	5	45.	0	0						
	15		15	22	8.																
	10		20	20	43.	19	29	15	55.	10	23:	3	17.	0							
	5		25	19	26:																
♒	0	♐	0	18	18.	17	6	13	38:	8	13:	1	15.	0							
	25		5	17	19.																
	20		10	16	30.	14	48:	11	55.	6	36:	0	0								
	15		15	15	51.																
	10		20	15	23.	14	13.	10	52:	5	36.	0									
	5		25	15	6.																
♑	0		0	15	0.	13	51	10	30.	5	15.										

When the Sunne entreth the 22 Grade of ♋, he toucheth our Horizon at 4 in the morning. Entring the 22 of ♑, he ryseth at 8. In the first of ♉, at 5. In the first of ♌, at 7. Note in all my tables, one pricke following the Minutes, diminisheth two, augmenteth sixtie quantitie.

VVhen the Sunne entreth the 22 Grade of ♋, he toucheth our